Configuration Guide

Version 5.5

The bridge to knowledge

CONFIDENTIAL INFORMATION

The information herein is the property of Ex Libris Ltd. or its affiliates and any misuse or abuse will result in economic loss. DO NOT COPY UNLESS YOU HAVE BEEN GIVEN SPECIFIC WRITTEN AUTHORIZATION FROM EX LIBRIS LTD.

This document is provided for limited and restricted purposes in accordance with a binding contract with Ex Libris Ltd. or an affiliate. The information herein includes trade secrets and is confidential

DISCLAIMER

The information in this document will be subject to periodic change and updating. Please confirm that you have the most current documentation. There are no warranties of any kind, express or implied, provided in this documentation, other than those expressly agreed upon in the applicable Ex Libris contract. This information is provided AS IS. Unless otherwise agreed, Ex Libris shall not be liable for any damages for use of this document, including, without limitation, consequential, punitive, indirect or direct damages.

Any references in this document to third-party material (including third-party Web sites) are provided for convenience only and do not in any manner serve as an endorsement of that third-party material or those Web sites. The third-party materials are not part of the materials for this Ex Libris product and Ex Libris has no liability for such materials.

TRADEMARKS

"Ex Libris," the Ex Libris Bridge to Knowledge , Primo, Aleph, Voyager, SFX, MetaLib, Verde, DigiTool, Rosetta, bX, URM, Alma , and other marks are trademarks or registered trademarks of Ex Libris Ltd. or its affiliates.

The absence of a name or logo in this list does not constitute a waiver of any and all intellectual property rights that Ex Libris Ltd. or its affiliates have established in any of its products, features, or service names or logos.

Trademarks of various third-party products, which may include the following, are referenced in this documentation. Ex Libris does not claim any rights in these trademarks. Use of these marks does not imply endorsement by Ex Libris of these third-party products, or endorsement by these third parties of Ex Libris products.

Oracle is a registered trademark of Oracle Corporation.

UNIX is a registered trademark in the United States and other countries, licensed exclusively through X/Open Company Ltd.

Microsoft, the Microsoft logo, MS, MS-DOS, Microsoft PowerPoint, Visual Basic, Visual C++, Win32, Microsoft Windows, the Windows logo, Microsoft Notepad, Microsoft Windows Explorer, Microsoft Internet Explorer, and Windows NT are registered trademarks and ActiveX is a trademark of the Microsoft Corporation in the United States and/or other countries.

Unicode and the Unicode logo are registered trademarks of Unicode, Inc.

Google is a registered trademark of Google, Inc.

Document released: April 2018

Web address: http://www.exlibrisgroup.com

Table of Contents

Updates to This Guide

This guide is being reissued due to the following changes:

- The Administration UI was changed. For more information, see **Administration** on page **17**.
- **Configuring Sequences** on page **110** was added.
- A new section, **Configuring Persistent Identifiers** on page **112**, was added. It replaces **Configuring Persistent Identifiers (Deprecated)** on page **117**.
- **Remote Institution Monitoring** on page **32** was added.

1

Understanding System Configuration

This section contains:

About System Configuration

Library Administrators configure components of the Rosetta system infrastructure such as user accounts, material flows, and content processing. These components are accessed through the Administrative interface of Rosetta, also referred to as Advanced Configuration.

The Administrative interface works on the consortium level for any customer. The Management interface works on the institutional level. For information on the Management interface and institutional level, see the *Rosetta Staff User's Guide*. For further information about consortium structure in Rosetta, see **Administrative Structure** on page **21**.

Ex Libris performs an initial configuration during implementation with input from the library Administrator. Afterwards, Administrators can modify advanced configuration settings and perform maintenance tasks on their own.

The following sections describe these configuration stages and methods.

Initial Configuration

Initial configuration tasks are performed by the System Administrator together with an Ex Libris support team member. Your library may be asked for information prior to or during this process, but Ex Libris conducts the tasks.

The Initial Configuration page has no link or user access from the Rosetta interface. The page is located at the following URL:

http://<server-name>:1801/mng/action/menus.do?menuKey=com.exlibris.dps.adm.general.menu.initial.

The Initial Configuration home page looks like the following:

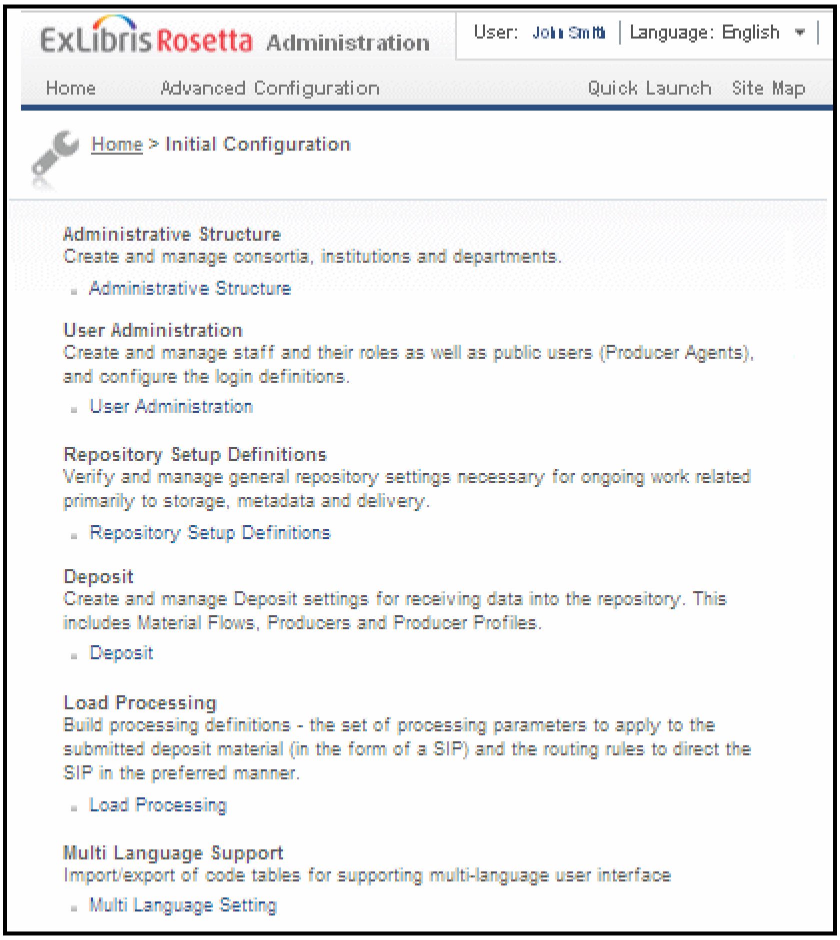


Figure 1: Initial Configuration Home Page

Configuration Pages

Configuration pages provide user interface elements (such as fields and drop-down lists) that Administrators and staff users can use when configuring the system. Administrators can use configuration pages for defining a wide variety of parameters, including SIPs, storage rules, delivery rules, and users.

Code Tables

Code tables are stored in the Rosetta system database. They enable an Administrator to define options that must be available to staff users on configuration pages when they configure the system.

Because code tables facilitate the translation of options to multiple languages, Administrators can use code tables to define those options that must be translated, including Producer groups, Producer classification, and material types.

Administrators can perform various actions, such as adding, activating, and deleting options in any code table. For more information on working with code tables, see **Working with Code Tables** on page **228**.

Mapping Tables

Mapping tables enable Administrators to control the connections between entities in the Rosetta system. For example, Administrators can specify which program the Rosetta system uses to validate PDF files by mapping a connection between the file format (PDF) and the program that validates PDF files.

Administrators use mapping tables to configure such components as delivery copyright statements and large file handling parameters. For more information on working with mapping tables, see **Working with Mapping Tables** on page **232**.

Configuration Files

Configuration files enable Administrators to define advanced settings at the consortial level, such as metadata and e-mail configuration. The configuration files can be stored in various formats, such as XML or XSL.

The Rosetta system includes a text editor that Administrators can use to edit configuration files. For more information, see **Working with Configuration Files** on page **225**.

2

Administration

An Administrator performs configurations in order to define general components that are not frequently changed. Administrators use the Administration page for this purpose.

To access the Administration page, log on to Rosetta. If your logon profile does not immediately take you to the Administration module, then, from the Management Home page, under **What else can I do**, click **Administer the System**. The Administration page opens.

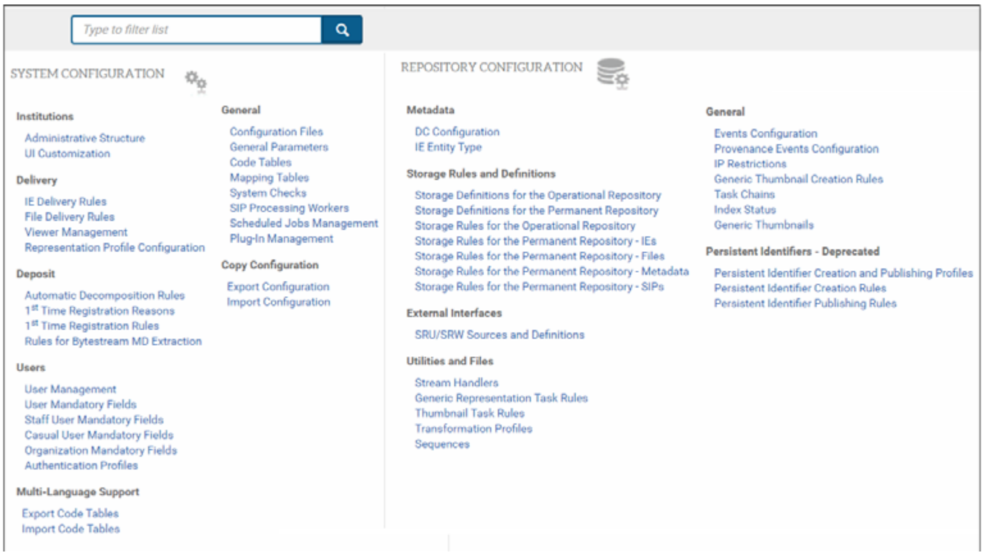


Figure 2: Advanced Configuration Page

The page contains configuration components that are organized into groups, as described in the following table:

Table 1. Administration Components

Group	Contains Components that Define...
Institutions	■ Administrative Structure For more information, see **Administrative Structure** on page **21**. ■ UI Customization For more information, see **UI Customization** on page **218**.
Delivery	■ IE Delivery Rules For more information, see **IE Delivery Rules** on page **39**. ■ File Delivery Rules For more information, see **File Delivery Rules** on page **42**. ■ Viewers Management For more information, see **Managing Viewers** on page **51**. ■ Representation Profiles Configuration For more information, see **Representation Profiles** on page **48**.
Deposit	■ Automatic Decomposition Rules For more information, see **Automatic Decomposition Rules** on page **67**. ■ 1st Time Registration Reasons For more information, see **Registration Process and Rules** on page **143**. ■ 1st Time Registration Rules For more information, see **Registration Process and Rules** on page **143**. ■ Rules for Bytestream MD Extraction
Users	■ User Management For more information, see **User Management** on page **139**. ■ User Mandatory Fields ■ Staff User Mandatory Fields ■ Casual User Mandatory Fields ■ Organization Mandatory Fields For more information, see **Defining User Mandatory Fields** on page **160**. ■ Authentication Profiles See **User Authentication with SAML** on page **161**.
Multi-Language Support	■ Export Code Tables ■ Import Code Tables For more information, see **Multi-Language Support** on page **221**.

Table 1. Administration Components

Group	Contains Components that Define...
General	■ Configuration Files For more information, see **Working with Configuration Files** on page **225**. ■ General Parameters For more information, see **Working with General Parameters** on page **227**. ■ Code Tables For more information, see **Working with Code Tables** on page **228**. ■ Mapping Tables For more information, see **Working with Mapping Tables** on page **232**. ■ System Checks For more information, see **System Checks** on page **235**. ■ SIP Processing Workers ■ Scheduled Jobs Management For more information, see the *Rosetta System Administration Guide*. ■ Plug-In Management For more information, see **Plug-in Management** on page **165**.
Copy Configuration	■ Export Configuration ■ Import Configuration For more information, see the *Rosetta System Administration Guide*.
Metadata	■ DC Configuration For more information, see **Configuring the DC Editor** on page **88** ■ IE Entity Type For more information, see **Configuring Intellectual Entity (IE) Types** on page **89**
Storage Rules and Definitions	■ Storage Definitions for the Operational Repository ■ Storage Definitions for the Permanent Repository ■ Storage Rules for the Operational Repository ■ Storage Rules for the Permanent Repository - IEs ■ Storage Rules for the Permanent Repository - Files ■ Storage Rules for the Permanent Repository - Metadata ■ Storage Rules for the Permanent Repository - SIPs
External Interfaces	■ SRU/SRW Sources and Definitions. For more information, see the *System Administration Guide*: **Configuring External Metadata: SRU/SRW** on page **53**.

Table 1. Administration Components

Group	Contains Components that Define...
Utilities and Files	■ Stream Handlers ■ Generic Representation Task Rules ■ Thumbnail Task Rules For more information, see **About Tasks** on page **74**. ■ Transformation Profiles For more information, see **Transformation Profiles** on page **97**. ■ Sequences For more information, see **Configuring Sequences** on page **110**.
General	■ Events Configuration For more information, see **Configuring Events** on page **104**. ■ Provenance Events Configuration For more information, see **Configuring Provenance** on page **105**. ■ IP Restrictions For more information, see **Configuring IP Restrictions** on page **105**. ■ Generic Thumbnail Creation Rules For more information, see **Generic Thumbnail Creation** on page **106**. ■ Task Chains For more information, see **Tasks, Task Chains, and Processes** on page **73** ■ Index Status ■ Generic Thumbnails For more information, see **Selecting the Default Thumbnail Image** on page **109**
Persistent Identifiers – Deprecated	■ Persistent Identifier Creation and Publishing Profiles For more information, see **Configuring Creation and Publishing Profiles** on page **119**. ■ Persistent Identifier Creation Rules For more information, see **Configuring Creation Rules** on page **123**. ■ Persistent Identifier Publishing Rules For more information, see **Configuring Publishing Rules** on page **127**.

3

Administrative Structure

This section contains:

Configuring a Consortium

If your organization is using the consortial capabilities of Rosetta, your Administrator will set up the individual institutions and make any edits to the consortium properties. This work begins on the List of Institutions page. To access the page, from the Administration Home page, click **Advanced Configuration**, then the **Administrative Structure** heading. This opens the List of Institutions page.

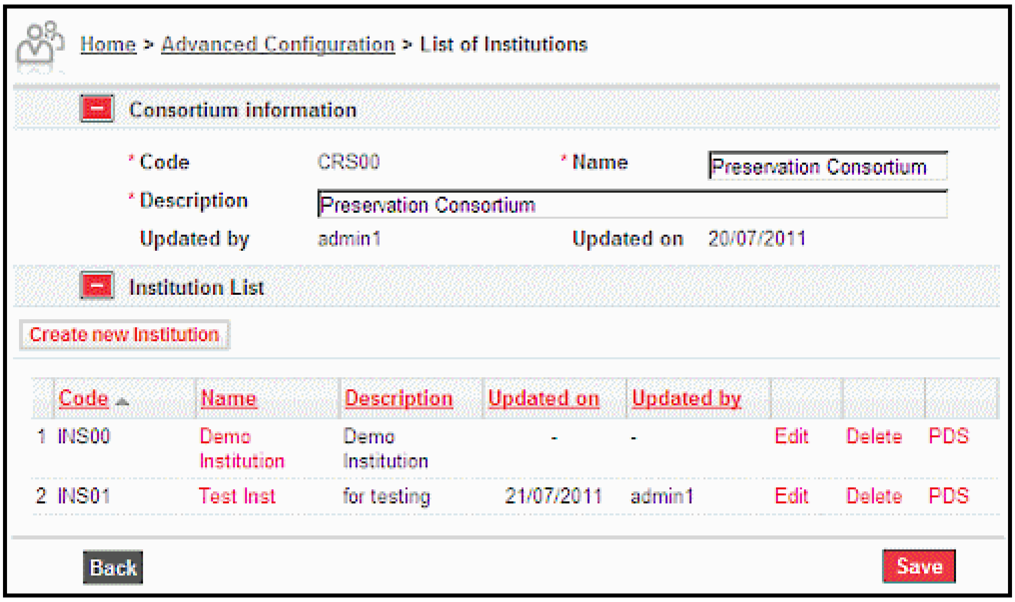


Figure 3: List of Institutions for Consortium

The name and description fields of the consortium are editable and any institutions that have been added to the consortium are listed on the lower part of the page.

Updating a Consortium

Administrators can change the properties of their existing consortium, such as changing the consortium's name and description.

To update a consortium:

1. From the Advanced Configuration home page, click **Advanced Configuration**, then the **Administrative Structure** heading. The List of Institutions page opens (see Figure 3).
2. In the **Consortium information** pane, modify the fields that you want to update.
3. Click **Save**.

The updated consortium is saved in the Rosetta system.

Configuring Institutions Within a Consortium

Administrators work with a consortium's institutions using the Institutions List page. The following actions can be performed on this page:

Viewing Institutions Within a Consortium

Administrators can view institutions within a consortium.

To view institutions within a consortium:

1. Access the List of Institutions page from the Administrative Home page: click **Advanced Configuration** > **Administrative Structure**.
2. The List of Institutions page opens.

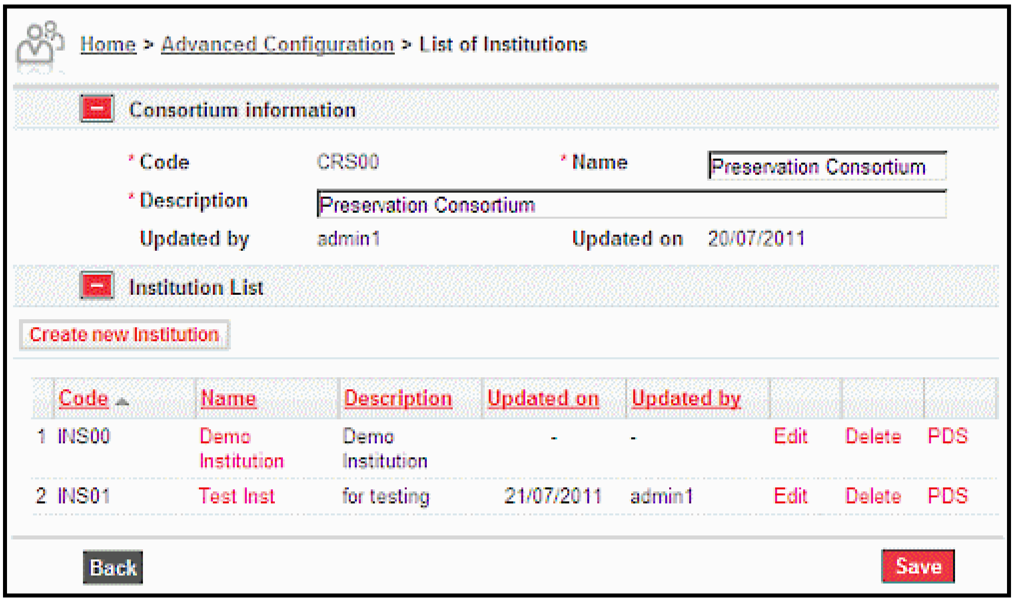


Figure 4: Institution List Page

Adding a New Institution

Administrators can add a new institution to a consortium. New institutions copy the settings of the first institution configured for this consortium. Settings can be edited after the new institution has been saved.

To add an institution:

1 Open the List of Institutions page by clicking **Advanced Configuration** > **Administrative Structure** from the Administration Home page.

2 Click the **Create new Institution** button.

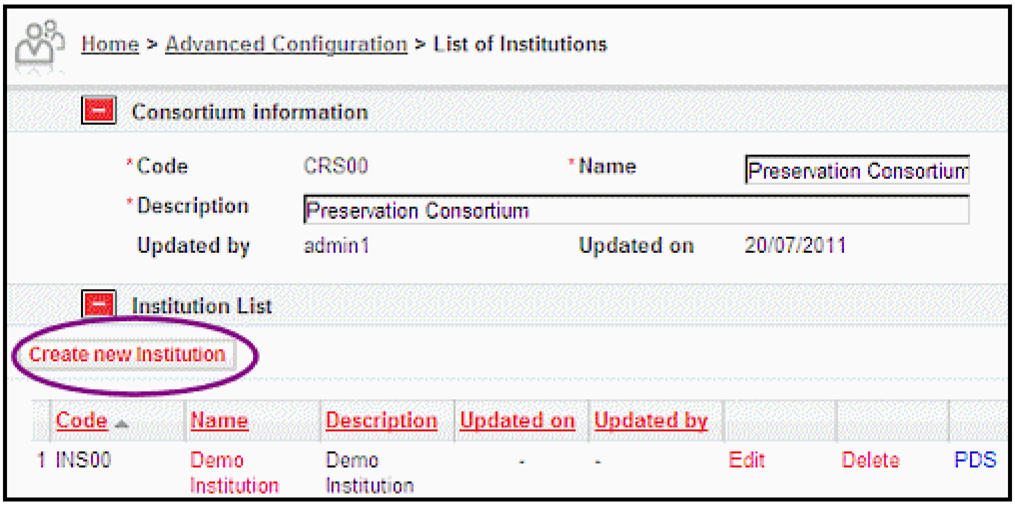


Figure 5: Create new Institution button

The institution information form opens.

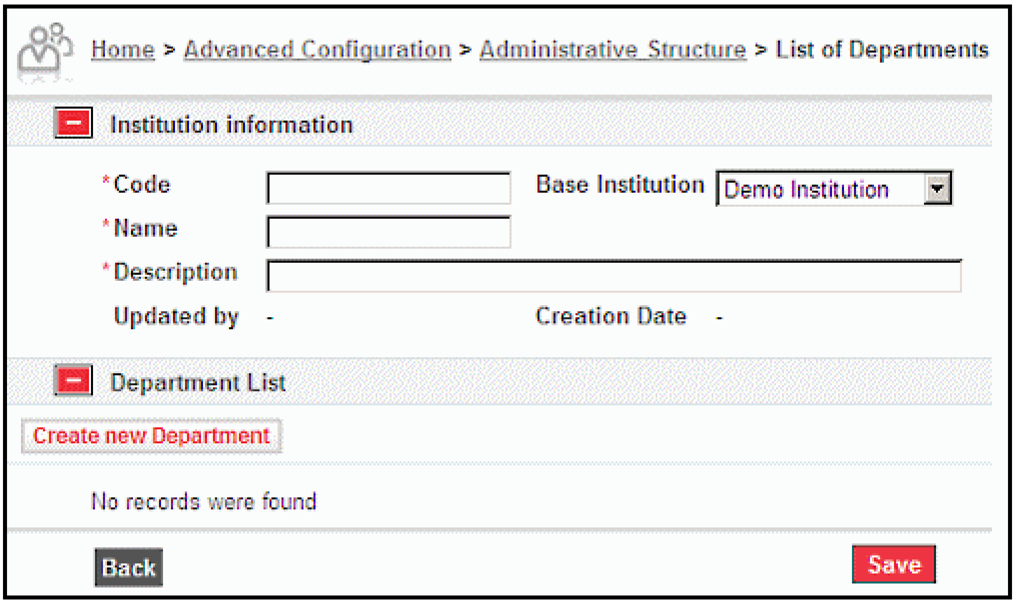


Figure 6: Institution Information Form/List of Departments

3 Enter information in the **Code**, **Name**, and **Description** fields.

NOTE:
The code is any alphanumeric combination (but cannot start with a number) that has meaning within the context of your institution. It will also be used for identification purposes within the Rosetta system.

4 Select a **Base institution** from the drop-down list of existing institutions.

NOTE:
The base institution determines default settings for institution-level items like metadata profiles, SIP processing rules, and SIP routing rules.

5 Click **Create New Department**.

NOTE:
Every institution must create at least one department before it can be saved to the database and included as a member of the consortium.

A new department form opens in a light box over the page.

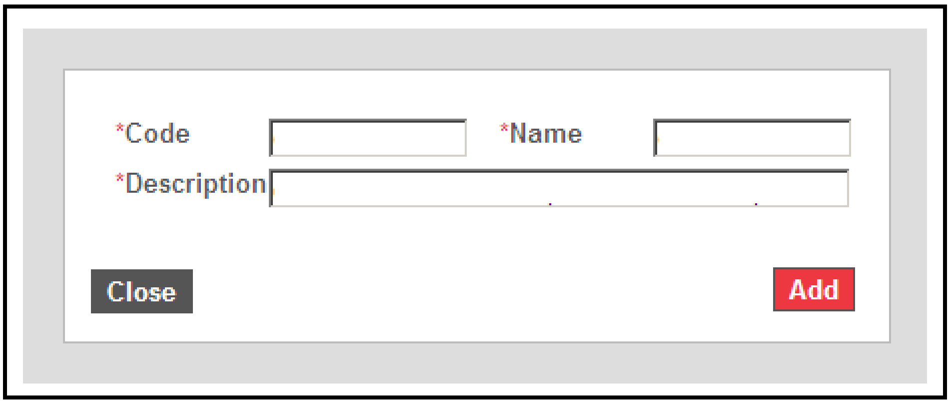


Figure 7: New Department Form

6 Enter a **Code**, **Name**, and **Description** for the department and click **Add**.

The department information displays on the Department List section of the List of Departments page.

7 Add as many departments as you need for your institution.

8 Click **Save**.

The new institution is displayed in the Institution List pane and is saved in the Rosetta system.

At the top of the list, Rosetta indicates your username and password for the new institution. This username and password is necessary to prevent your current user information from being shared with other institutions. To add users to your new institution, log out and log in again with the new username and password.

Updating an Institution

Administrators can change the properties of an existing institution, such as changing the institution's name and description, by updating it.

To update an institution:

1. On the Institution List page (see **Viewing Institutions Within a Consortium** on page 23), in the **Institution List** pane, locate the institution with which you want to work and click **Edit**.

   The Department List page opens.

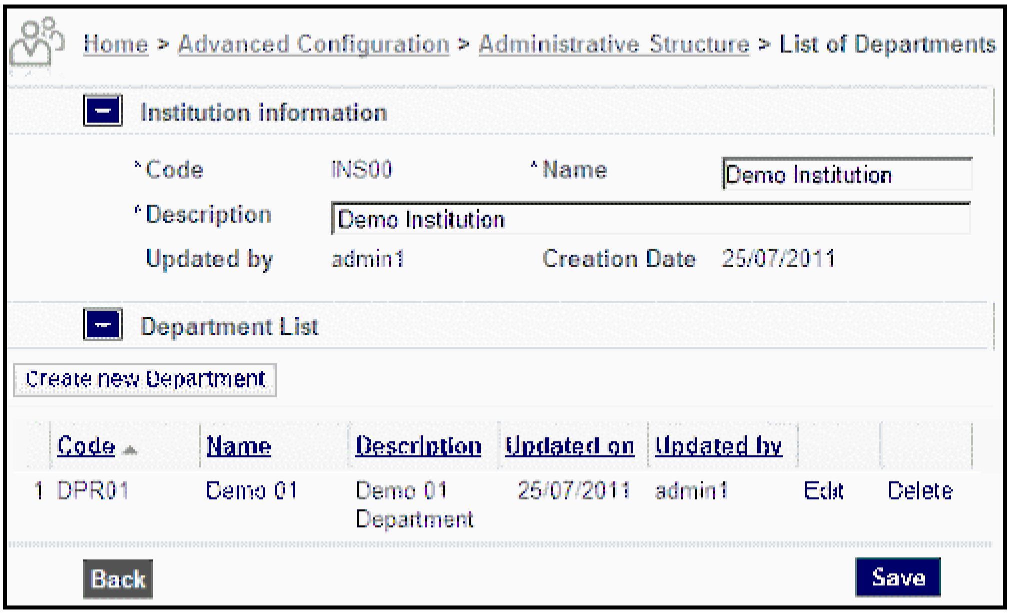


Figure 8: Department List Page

2. In the **Institution Information** pane, modify the fields that you want to update.
3. Click **Save**.

The updated institution is saved in the Rosetta system.

Configuring an Institution to Work With a Patron Directory Service

In order for users to sign in to the new institution, the institution must be configured in the PDS as well as in Rosetta.

To create a PDS-enabled institution:

1 On the Institution List page (see **Viewing Institutions Within a Consortium** on page 23), in the **Institution List** pane, locate the institution you want to configure for PDS and click the corresponding **PDS** text link.

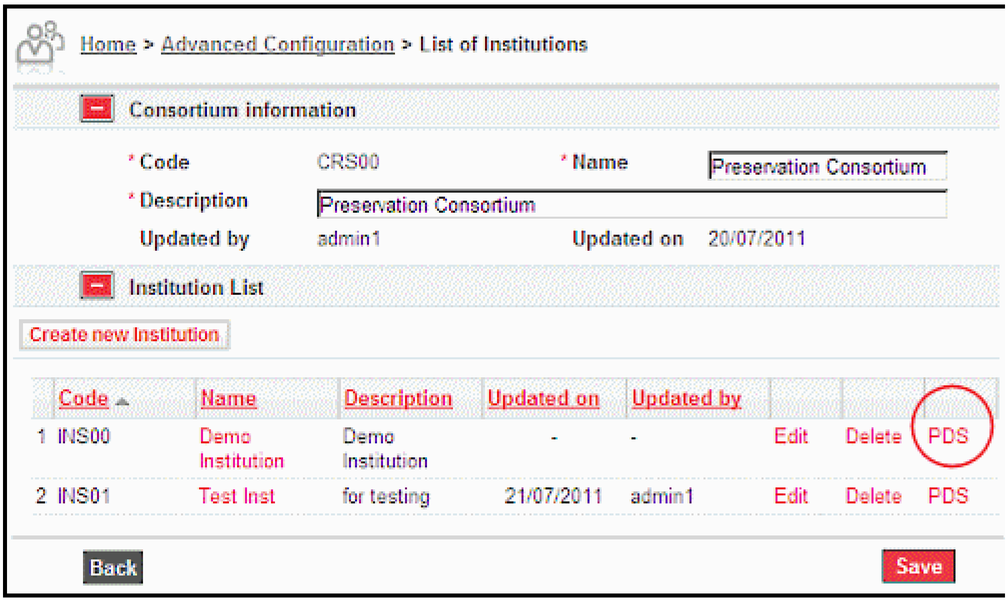


Figure 9: PDS Link from the List of Institutions Page

The Ex Libris PDS Configuration page opens.

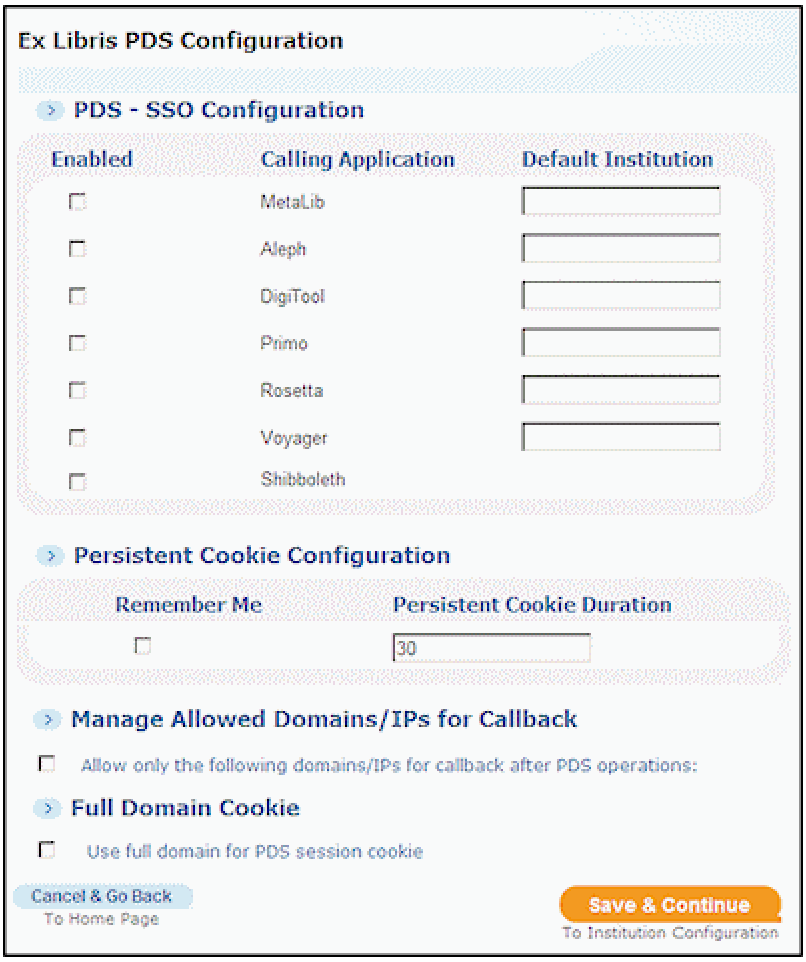


Figure 10: Ex Libris PDS Configuration Form

2 Fill out the PDS Configuration form and click **Save & Continue** to move through the remaining configuration pages.

For information about Patron Directory Services and how to configure them, see the *Patron Directory Services Guide* in the Cross-Product section of the Ex Libris Documentation Center.

Deleting an Institution

Administrators can delete existing institutions as long as there are no IEs associated with the institution. An Administrator cannot delete an institution through which he or she is currently logged on.

CAUTION:

Deleting an institution will cause the user to lose access to all objects that were deposited through this institution.

To delete an institution:

1. On the Consortium Information page (see **Viewing Institutions Within a Consortium** on page **23**), in the **Institution List** pane, locate the institution that you want to delete and click **Delete**. The confirmation page opens.
2. Click **OK**.

The institution is deleted from the Rosetta system.

Configuring Departments Within an Institution

Administrators can work with an institution's departments using the List of Departments page. The following actions can be performed on this page:

- **Viewing Departments Within an Institution** on page **29**
- **Adding a New Department** on page **30**
- **Updating a Department** on page **31**
- **Deleting a Department** on page **32**

Viewing Departments Within an Institution

Administrators can view departments within an institution.

To view departments within an institution:

1. On the Consortium List page (see **Configuring a Consortium** on page **21**), in the **Institution List** pane, locate the institution with which you want to work and click **Edit**. The Institution List page opens.
2. Locate the institution within which you want to view departments and click **Edit**. The Department List page opens.

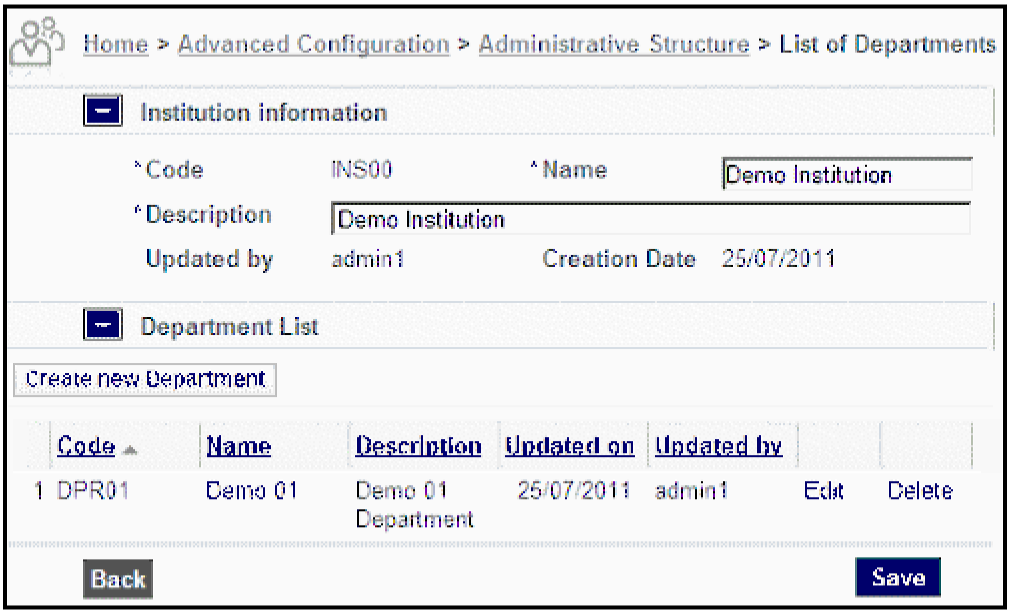


Figure 11: Department List Page

Adding a New Department

Administrators can add a new department to an institution.

NOTE:

There is no limit to the number of departments that can be added to an institution.

To add a department:

1 On the Department List page (see **Viewing Departments Within an Institution** on page **29**), click the **Create New Department** button.

A blank department form opens in a light box over the page.

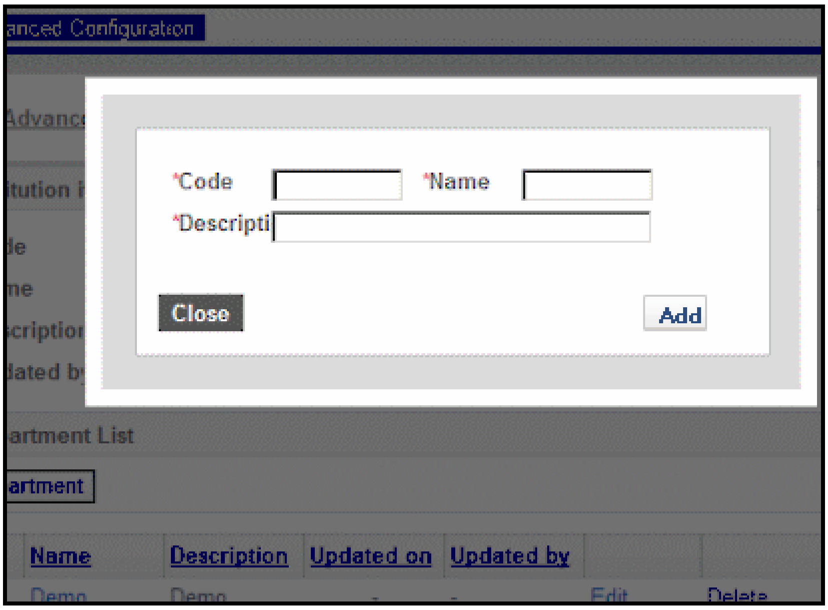


Figure 12: New Department Form

2 Enter information for all three required fields.

3 Click **Add**.

The new department is displayed in the Department List pane and is saved in the Rosetta system.

Updating a Department

Administrators can change the properties of an existing department, such as changing the department's name and description, by updating it.

To update a department:

1 On the Department List page (see **Viewing Departments Within an Institution** on page 29), in the **Department List** pane, locate the department you want to change and click **Edit**.

The department information displays in a light box over the page.

2 Modify the fields that you want to update.

3 Click **Save**.

The updated department is saved in the Rosetta system.

Deleting a Department

Administrators can delete an existing department. However, Administrators cannot delete a department when the department's users (such as Producer Agents and staff users) are depositing, or have already deposited, content to the Rosetta system.

To delete a department:

1. On the Institution Information page (see **Viewing Departments Within an Institution** on page 29), in the **Department List** pane, locate the department that you want to delete and click **Delete**. The confirmation page opens.
2. Click **OK**.

The department is deleted from the Rosetta system.

Remote Institution Monitoring

You can configure the consortium institution to view dashboard BIRT reports provided by another instance that is not part of your consortia.

Member Institution Configuration

Perform the following configurations for each member institution for which you want to view BIRT reports:

1. Set the `enable_remote_reports_user` parameter (Admin UI > General > General Parameters) to `true`.
2. Take the key from the `remote_access_key` parameter to enter in the consortium institution.
3. Click **Update**.

Consortium Institution Configuration

Perform the following configurations for the consortium institution:

1. Set the `remote_management` parameter (Admin UI > General > General Parameters) to `true`.
2. Open the **Remote Instances for Reports** mapping table (Admin UI > General > Mapping Tables). The following appears:

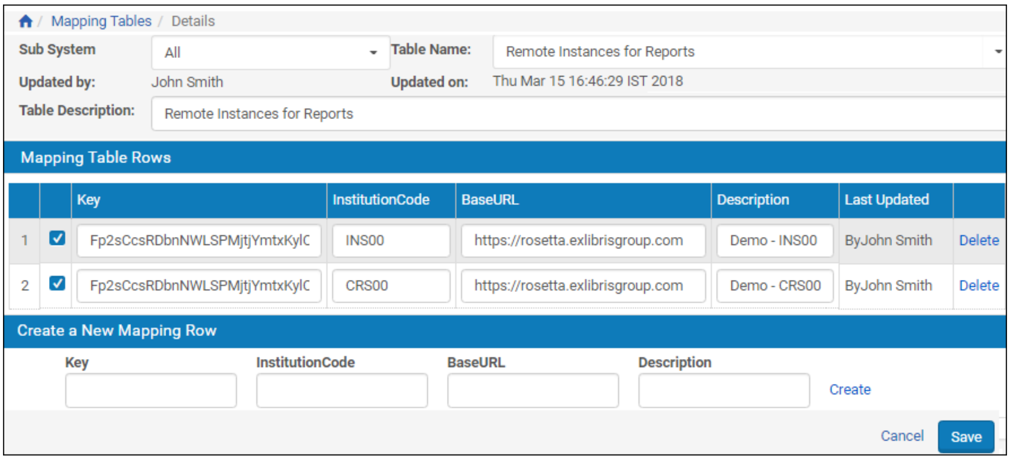


Figure 13: Remote Instances for Reports

3 For each member institution for which you want to view BIRT reports, enter the key, institution code, base URL, and description.

4 Click **Save**.

A drop-down list appears that allows you to display the BIRT reports provided by another instance that is not part of your consortia:

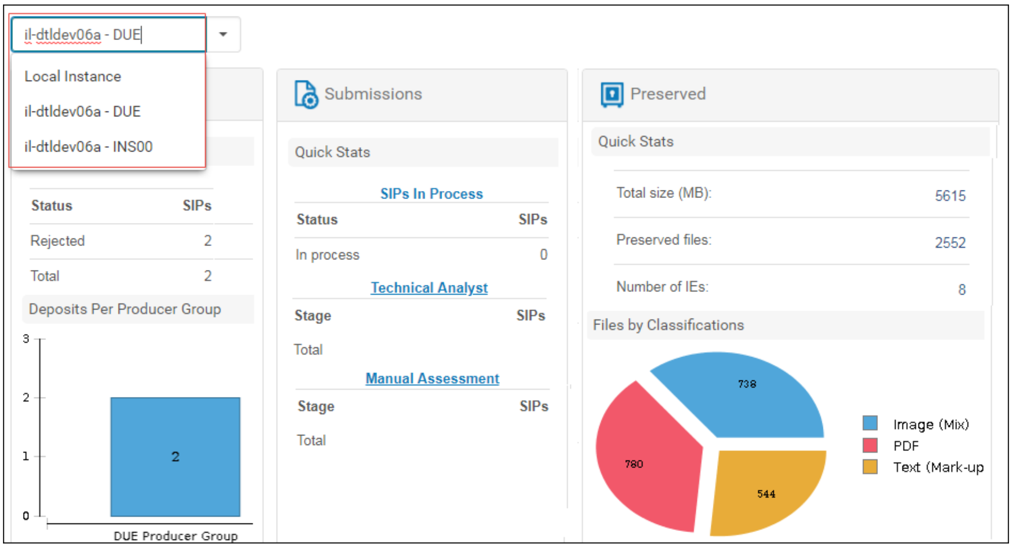


Figure 14: Remote Institution Monitoring

4

Configuring Delivery

This section contains:

Understanding Delivery

The Rosetta system enables users to view objects such as intellectual entities, representations, and files that are stored in the Rosetta system. These objects can be viewed by staff users (for example, Assessors viewing content deposited by Producer Agents) as well as external users (for example, a reader with a subscription to the library), also referred to as content consumers.

The diagram below illustrates the organization of the components that enable content delivery.

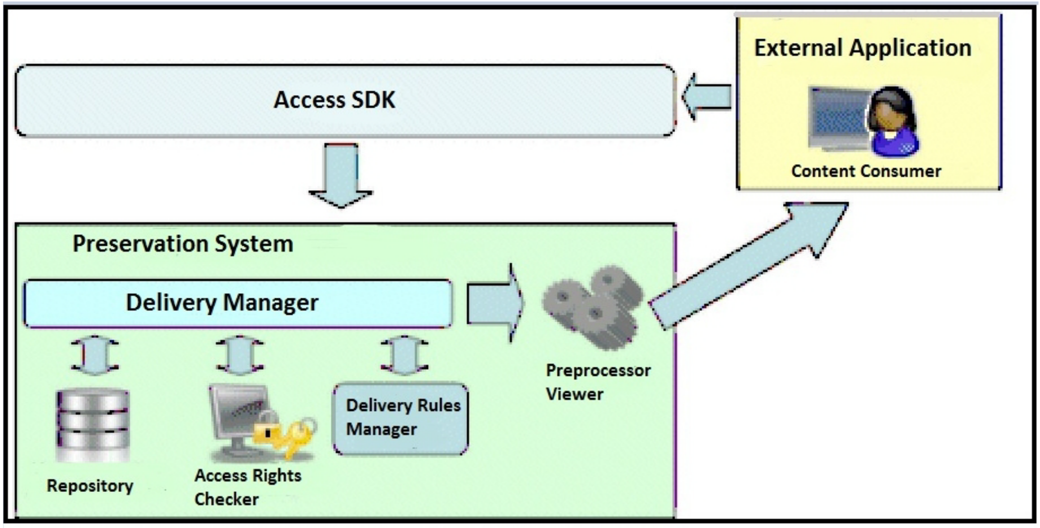


Figure 15: Delivery Information Flow

The delivery flow consists of the following stages:

1 A content consumer uses an external application to request a content object from the Rosetta system.

2 The external application sends the request to the Delivery Manager.

3 The Delivery Manager retrieves the content from the repository.

4 The Access Rights Checker determines whether the content consumer has the appropriate privileges to view the requested content object.

5 If the content consumer possesses the necessary viewing access rights, the system determines whether there are concurrent user access rights set for the IE. If so, the Access Rights Checker determines the number of copies currently in use by other users. If the number is less than the maximum allowed at one time, the user is registered as a viewer of the IE, the IE is delivered to the user, and one of the available open copies becomes unavailable. If all available copies are in use, the user is asked to wait and try again.

6 The Delivery Rules Manager verifies the input parameters of the content object (for example, whether the object is an IE, a representation, or a file), and determines which representation profile should be used to display the content object.

7 The selected representation is prepared to be viewed by the viewer. The viewer might require the representation or file to be processed by a component called a pre-processor, which is a plug-in that migrates the files or the metadata of the object.

8 When the viewer preprocessor finishes processing the content object, the object is redirected to the viewer, either an internal viewer bundled with Rosetta or an external viewer that resides outside of Rosetta.

9 The resource discovery channel (for example, Primo) or OPAC displays the content to the content consumer.

10 If concurrent user access rights are being applied: While the user has the IE checked out, the viewer and server exchange information about the user's activity related to the IE. If no activity occurs within a set amount of time (by default, two minutes), the user is disconnected and the IE becomes available to another user.

Delivery Components

The following components are used in the content delivery process:

- Delivery Manager (see **About the Delivery Manager** on page **37**)
- Viewer (see **Rosetta Viewers** on page **50**)
- Viewer preprocessor (see **About Viewer Preprocessors** on page **65**)

About the Delivery Manager

The Delivery Manager consists of the following components:

- **Access Rights Checker**
- **Delivery Rules Manager**

Access Rights Checker

When Producer Agents deposit content, they select an access rights option among the options defined by staff users. For example, a Producer Agent can select the option that grants access to a specific group of content consumers.

The Access Rights Checker determines whether the content consumer who requested the content has the appropriate rights to view this content. If the content consumer does not have the relevant access rights, a warning message is displayed.

Delivery Rules Manager

Delivery rules define how the requested content object is to be delivered to the content consumer. These rules are configured by an Administrator.

For each delivery rule, an Administrator defines the input parameters of a content object (such as IE entity type) and output parameters (Representation Profile). The output parameters are applied if the actual input parameters of the content object match the input parameters of the existing delivery rule. (For more information on how the content object is displayed, see **Rosetta Viewers** on page **50**.)

Delivery Rules

Delivery rules are used by Rosetta to match the requested IE, representation, or file with the most appropriate viewer.

The following features characterize current Delivery rules:

- Separate lists for IE and file Delivery rules (but no rules for representations)
- Representation Profiles and viewers managed through the Rosetta UI and not through a mapping table (as was the case with the viewing profile in earlier versions).
- Integration of more than one IE viewer to view the whole representation or even a group of representations (such as METS ALTO), rather than having to read one file at a time from the METS file.

Example of Delivery Rules Use

The following example illustrates the delivery rules:

The institution uses Rosetta to preserve a collection of digitized manuscripts. Each manuscript is an IE with three representations:

- TIFF images (Preservation Master)
- JPEG2000 images (Modified Master)
- JPEG images (Derivative Copy) for some of the IEs and one PDF file (Derivative Copy) for the other IEs

Using the IE Delivery rules, the System Administrator can define two rules:

- The first rule delivers the JPEG images through a viewer called Book Reader. If there is no such representation, the PDF representation is delivered through a viewer called FlexPaper.
- The second rule delivers the JPEG2000 files only for authorized researchers.

Delivery Settings in the User Interface

The Delivery settings interface supports this functionality from the following page:

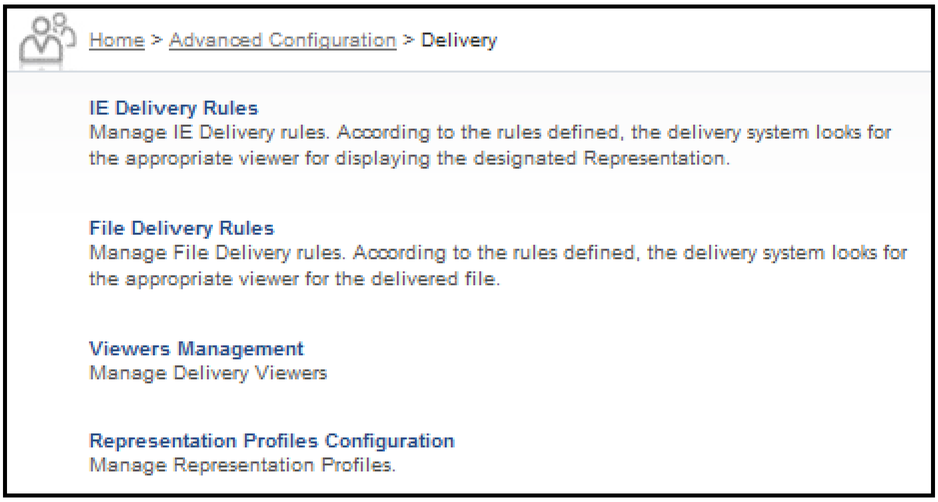


Figure 16: Delivery Page in the Administrative Interface

The list of Delivery configuration items includes:

- **IE Delivery Rules** on page **39**
- **File Delivery Rules** on page **42**
- List of viewers (**Managing Viewers** on page **51**)
- List of representation profiles (**Representation Profiles** on page **48**)

IE Delivery Rules

IE delivery rules allow users to define which viewers will be used to deliver which representations of an IE.

IEs can be grouped by the IE Entity Type attribute, and each group has a similar structure of representations. According to this structure, the System Administrator can define the priority for delivering the representations and the viewer that should be used for each representation(s).

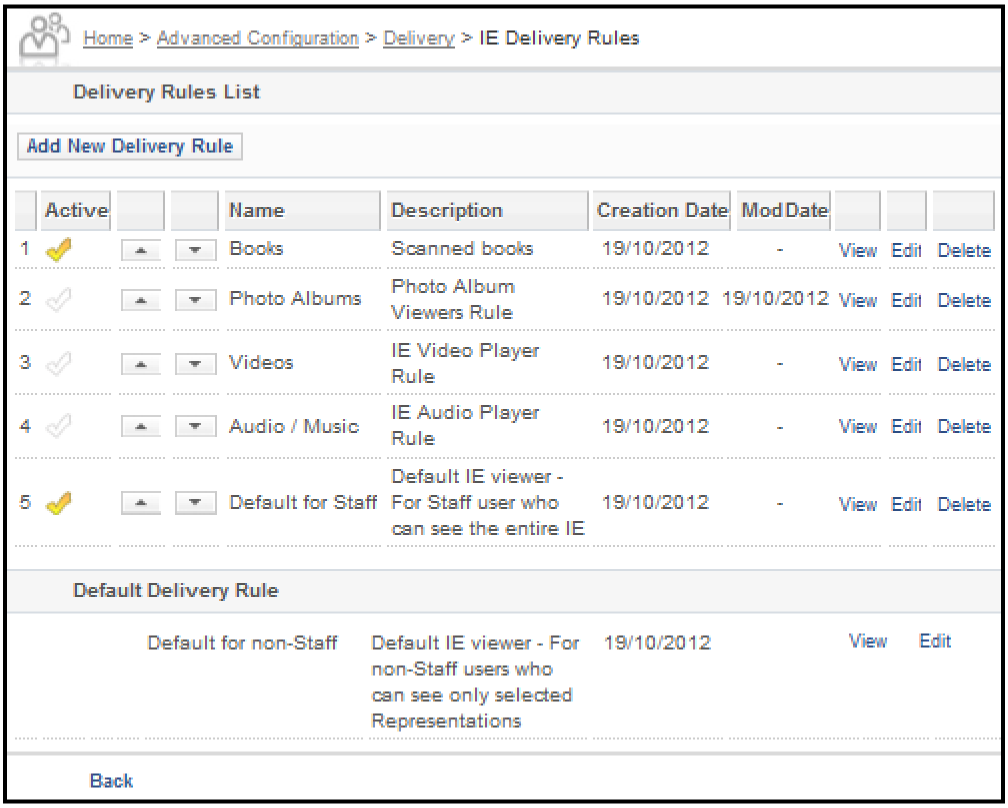
Every time an IE is requested, the Delivery Manager finds the matching rule based on the input parameters. Then the Delivery Manager attempts to match the first Representation Profile to one of the representations (or to a group). If a match is not found, the next Representation Profile is tried, and so on, until there is a match.

When a match is found, the representation is delivered through the defined viewer.

For each rule, there is a default output that delivers the default representation (for example, Preservation Master) through the default General IE Viewer. This viewer displays the structural map of the METS file and a link to each of the files.

IE Delivery Rules Interface

In the list of Delivery rules, the user can set the order by which the system attempts to match the rules. The up and down arrow buttons (see **Figure 17**) can be used to change the order of the rules. The first rule is considered first, then, if there is no match, the second, and so on. Once the system finds a match to the input parameters, it stops looking and uses that rule.



Home > Advanced Configuration > Delivery > IE Delivery Rules

Delivery Rules List

Add New Delivery Rule

	Active			Name	Description	Creation Date	ModDate			
1				Books	Scanned books	19/10/2012	-	View	Edit	Delete
2				Photo Albums	Photo Album Viewers Rule	19/10/2012	19/10/2012	View	Edit	Delete
3				Videos	IE Video Player Rule	19/10/2012	-	View	Edit	Delete
4				Audio / Music	IE Audio Player Rule	19/10/2012	-	View	Edit	Delete
5				Default for Staff	Default IE viewer - For Staff user who can see the entire IE	19/10/2012	-	View	Edit	Delete

Default Delivery Rule

Default for non-Staff	Default IE viewer - For non-Staff users who can see only selected Representations	19/10/2012	View	Edit

Back

Figure 17: List of IE Delivery Rules

Users can view, edit, or add a rule using the text links and buttons on the IE Delivery Rules page. These actions open the IE Delivery Rule Details page (**Figure 18**).

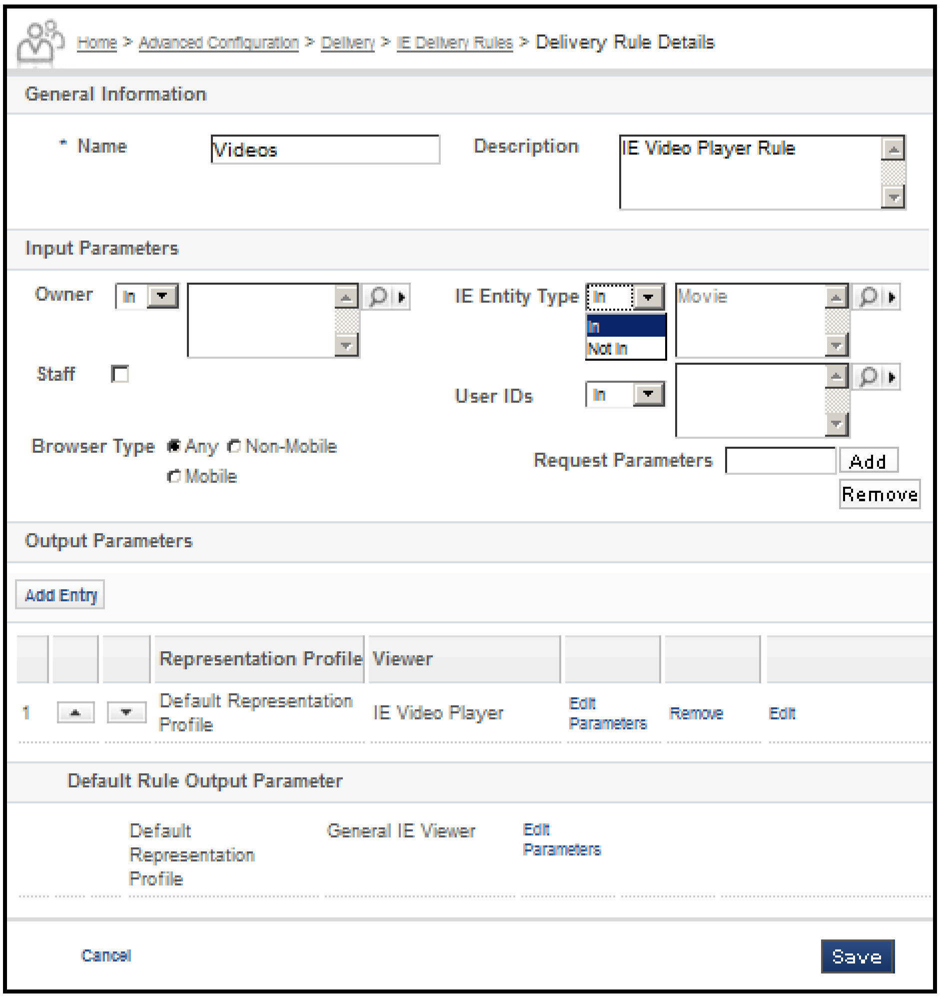


Figure 18: Delivery Rule Details Page

The IE Delivery Rule Details page includes three parts:

- General Information: The unique name and description of the rule.
- Input Parameters: Parameters that are matched with attributes of the requested IE, attributes of the user, and attributes of the calling system. If the operator is **In**, the rule engine attempts to match any of the values; a **Not in** condition will be met if none of the values match.
  - IE attributes – includes the IE Entity Type and the Owner fields.
  - User attributes – for example, specific user IDs.
  - System/request attributes – Browser type (mobile, non-mobile), request open parameters (for example, CALLING_SYSTEM=WEB_OPAC)
- Output Parameters: An ordered list of output pairs. Each pair includes a Representation Profile and a matching viewer.

- The Representation Profile is a set of attributes that define a representation or group of representations that can be viewed as a whole by a dedicated viewer. See **Representation Profiles** on page **48** for more details.
- The viewer contains the definition and the parameters of the tool used to deliver the files to the user. The viewer entity contains the URL of the viewer, the plug-in that can be used for processing the files before they are directed to the viewer (VPP), and a unique name and description. See **Rosetta Viewers** on page **50** for more details about viewers and their management.

File Delivery Rules

The file delivery rules are used to match the file's technical attributes with the appropriate file viewer. This comes into play when a file is requested specifically in a delivery URL, in one of two cases:

- External request - when a file is requested by an external source that holds the file PID and uses it to deliver only the file, without any metadata. For example, `http://rosetta.exlibrisgroup.com:1801/delivery/DeliveryManagerServlet?dps_pid=FL1045&dps_func=stream`
- Internal request – when the representation of an IE is delivered through the General IE viewer, each time the user opens a file for view, and the Delivery Manager uses the file delivery rule to locate the viewer that should be used.

File Delivery Rules Interface

The file delivery rules are managed separately from the IE rules.

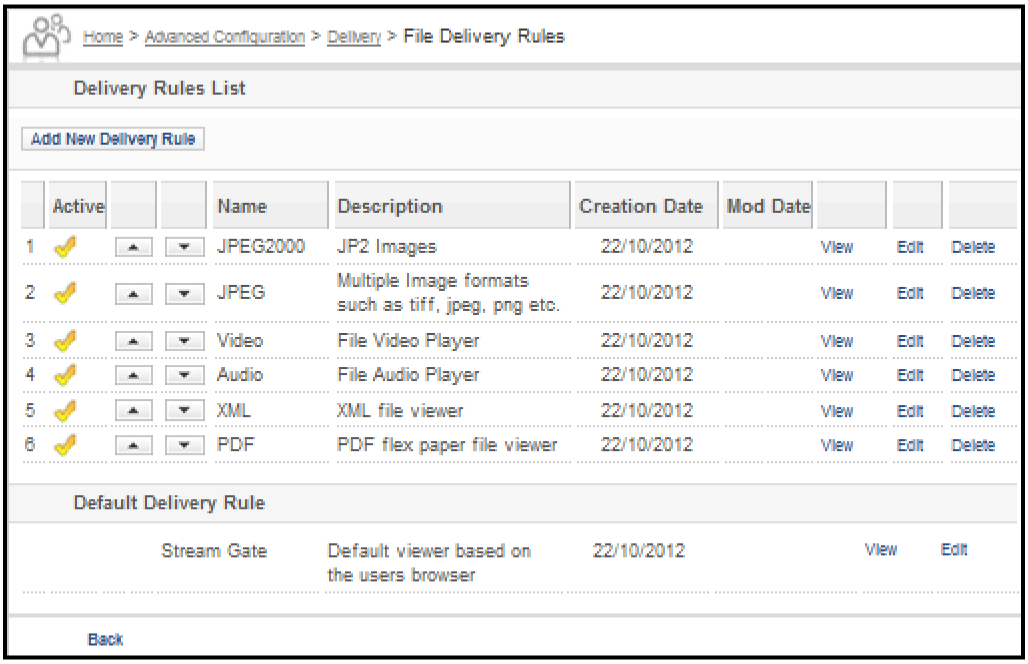


Figure 19: List of File Delivery Rules

Users can view, edit, or add a rule using the text links and buttons on the File Delivery Rules page. These actions open the File Delivery Rule Details page (**Figure 20**).

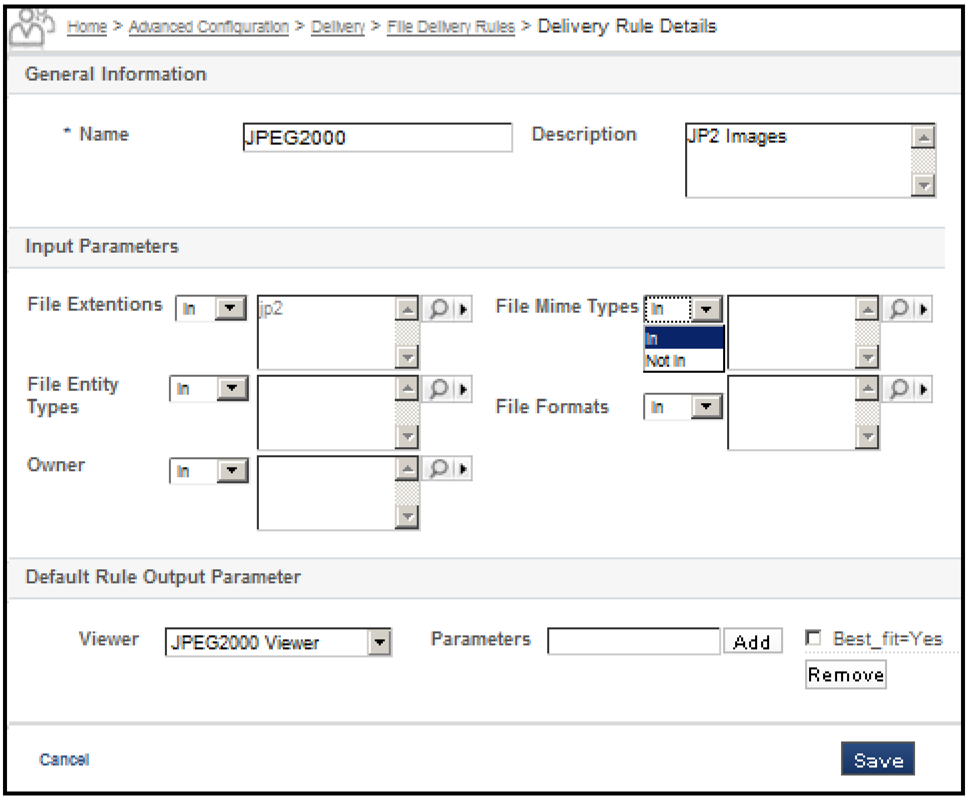


Figure 20: File Delivery Rule Details Page

Working with Delivery Rules

The following actions can be performed on the List of Delivery Rules page:

- Adding a Delivery Rule on page 44
- Updating a Delivery Rule on page 47
- Deleting a Delivery Rule on page 47
- Activating and Deactivating a Delivery Rule on page 47
- Re-Ordering the List of Delivery Rules on page 48

Adding a Delivery Rule

When adding a new delivery rule, Administrators define general information for the rule (such as the name and description of the rule), input parameters (such as entity type and file format), and output parameters (such as viewer preprocessor and viewer to be used to display the content).

To add a delivery rule:

1 From the IE or File Delivery Rules page, click **Add Delivery Rule**. The Delivery Rule Details page opens.

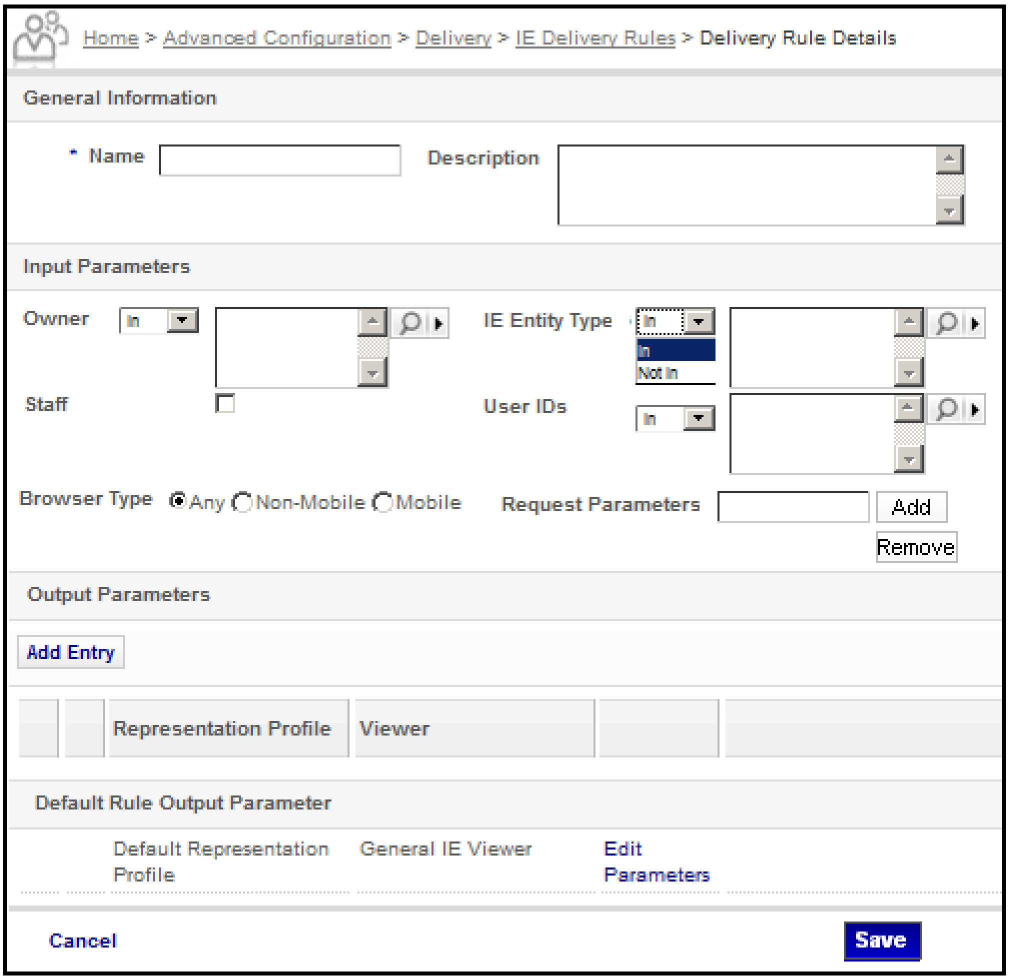


Figure 21: Add Rule Page (IE rule example)

2 In the **General Information** pane, enter a name for the rule and, optionally, a description.

3 Use the information in **Table 2** for IEs and **Table 3** for File Delivery Rules to enter information in the remainder of the fields. Fields with a magnifying glass and arrow open a selection list in a light box. For these field formats, entries must be selected from the available list(s).

NOTE:
Any fields without entries will be ignored when the system is looking for a match. All populated fields must match.

Table 2. IE Delivery Rule Details

Field	Description
Owner	This Institution that owns the IE
IE Entity Type	This type of resource, such as a book or a movie
Staff	Checked, this indicates that any staff member can be calling the rule
User IDs	The ID of the user calling the rule
Browser Type	Select non-mobile for a standard desktop or laptop, mobile for a smart phone or tablet. External viewers that support an alternative UI for mobile devices can use this parameter.
Request Parameters	An open parameter known to the calling system (for example, Primo or Aleph) and shared with Rosetta (through the Delivery rules)
Add Entry	Button that opens a light box containing options for a Representation Profile and Viewer combination
Representation Profile	The profile for the output object, such as Derivative Copy or Preservation Master
Viewer	The type of viewer (for example, Flex Paper or Photo Album) that delivers the IE in the representation profile

Table 3. File Delivery Rule Details

Field	Description
File Extensions	The typically 3-digit extension identifying the file format
File Mime Types	The classification of a file type used for identifying Internet types. Stands for Multi-purpose Internet Mail Extensions.
File Entity Types	Entity type used by the file/file's format
File Formats	The format of the file as defined by several factors including the numeric fmt/ standardized and used in the Preservation module.
Owner	The institution carrying out the rule.
Viewer	The type of viewer (for example, Flex Paper or Photo Album) that delivers the IE in the representation profile

Table 3. File Delivery Rule Details

Field	Description
Parameters	An open parameter shared by the calling system and Rosetta. Multiple parameters can be added (and removed) as part of the default output parameter.

4 Click **Save**.

The new delivery rule is saved in the Rosetta system.

Updating a Delivery Rule

Administrators can update general, input, and output information of an existing delivery rule.

To update a delivery rule:

1 On the List of Delivery Rules page (see **Delivery Rules** on page 38), locate the delivery rule you want to update and click **Update**. The Rule Editor page opens.

2 Modify the fields you want to update, and then click **OK**.

The delivery rule is updated in the Rosetta system.

Deleting a Delivery Rule

Administrators can delete an existing delivery rule.

NOTE:
After deleting a delivery rule, it is no longer available to the Rosetta system for matching.

To delete a delivery rule:

1 On the List of Delivery Rules page (see **Delivery Rules** on page 38), locate the delivery rule you want to delete and click **Delete**. The confirmation page opens.

2 Click **OK**.

The delivery rule is deleted from the Rosetta system.

Activating and Deactivating a Delivery Rule

Administrators can activate or deactivate a delivery rule. After deactivating a delivery rule, it is no longer available to the Rosetta system for matching.

On the List of Delivery Rules page, the delivery rule's status is indicated by the check mark in the **Active** column:

- Yellow - The delivery rule is active.
- Grey - The delivery rule is inactive.

To activate or deactivate a delivery rule:

1. On the List of Delivery Rules page (see **Delivery Rules** on page 38), locate the delivery rule you want to activate or deactivate.
2. In the **Active** column, click the check mark. The check mark in the **Active** column indicates the new status.

The delivery rule is changed from active to inactive, or from inactive to active.

Re-Ordering the List of Delivery Rules

To define the viewer, viewer profile, and viewer preprocessor that must be used for a specific content object, the Rosetta system compares the input parameters defined in a delivery rule with the parameters of the content object.

The delivery rules are analyzed in the same order as they are displayed on the List of Delivery Rules page. The Rosetta system uses the first delivery rule found that matches the parameters of the content object.

An Administrator can re-order delivery rules to change their priority.

To re-order the list of delivery rules:

On the List of Delivery Rules page (see **Delivery Rules** on page 38), select the rule, and then use the up and down arrows to change the rule's priority.

The Rosetta system now analyzes the delivery rules in the newly defined order.

Representation Profiles

The Representation Profile is a set of attributes that define a representation or group of representations which, based on their content, should be viewed by a dedicated viewer that can handle them as a whole.

The following are two examples:

- a representation that contains the JPEG images of a scanned book, which can be delivered through the Book Reader – see the example below
- a set of images held in one representation and a METS ALTO file that is held in a different representation. The Representation Profile can be defined so it includes these two representations and the METS-ALTO viewer will deliver all the relevant files from both representations.

The Representation Profiles are managed in the List of Representation Profiles:

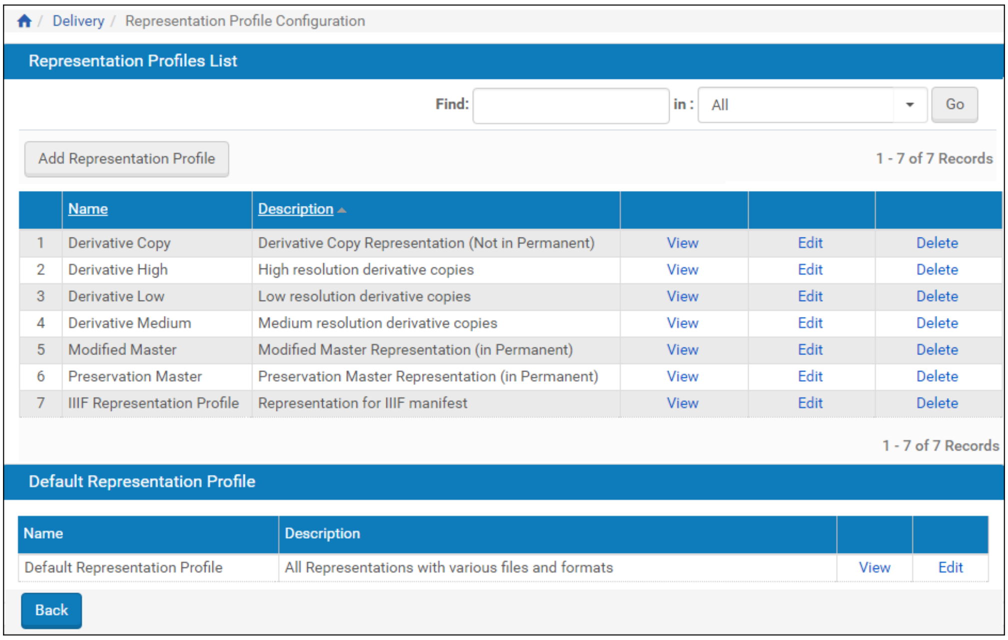


Figure 22: List of Representation Profiles

The Representation Profile includes the attributes of the representation as shown in the details of one profile (Derivative Low, see **Figure 23**).

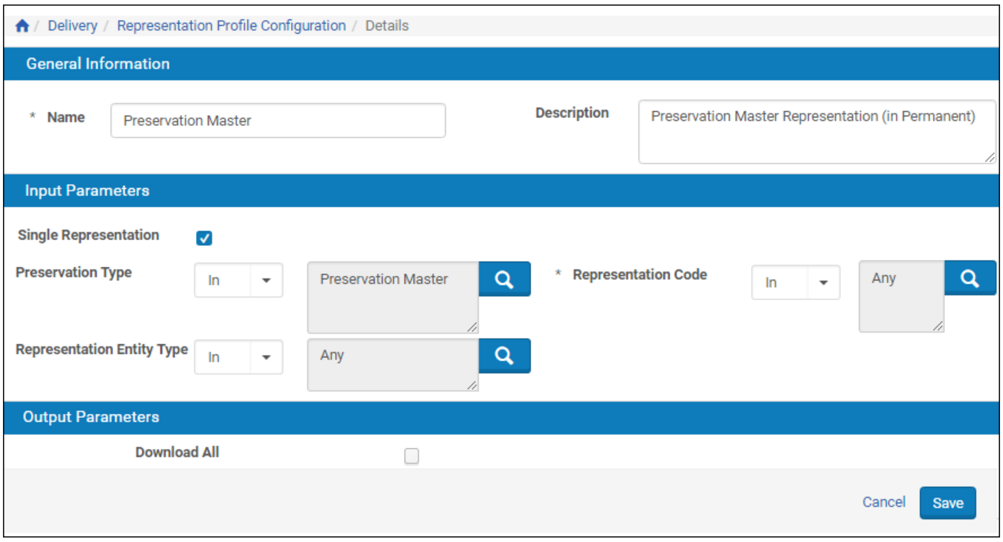


Figure 23: Representation Profile Details

The Input Parameters section includes the following fields:

- Preservation Type: The out-of-the-box values of this field are Preservation Master, Modified Master, and Derivative Copy. However, users can add values to the code table and define additional types of representations.
- Representation Code: The out-of-the-box values of this field are High, Medium, and Low. This field is used mostly for derivative copies, in order to differentiate between them.
- Representation Entity Type: This field has always been part of the Data Model, but it was never used in any of the Rosetta modules. It can be used as another field by which to group representations or to identify specific representations as a profile.

NOTE:

A process automation task is available for updating representation metadata for a set of representations.

During delivery, multiple representations are sorted according to the fields in the chosen Representation Profile: first by Preservation Type, then by Representation Code, and finally by Representation Entity Type. If a field is marked as Any, the field is ignored for sort purposes.

NOTE:

Logical structmap will precede physical structmap of the same representation.

To have the Download icon appear in the General IE Viewer that allows you to download all files in an IE, select the **Download** checkbox.

Rosetta Viewers

Rosetta viewers are used by the Delivery Manager to enable content consumers to view, print, and save objects. Information accessed in this way is read-only and cannot be modified in the viewer.

A viewer displays a representation or a group of representations as defined in the Representation Profile specified by the delivery rules. (For more information, see **Delivery Rules Manager** on page 37.)

NOTE:

The Representation Profile determines which representation(s) of the IE should be delivered. The Delivery Rule finds the matching representation(s) of the processed IE. For example, the first Representation Profile is the Low Resolution Derivative Copy Representation. If it is determined that this doesn't exist, the Preservation Master Representation is delivered.

To display different types of content (such as images, text, or video content) for IEs, representations, and files, the Rosetta system provides these different types of viewers out-of-the-box. (Additional viewers can be added and configured.)

Managing Viewers

Rosetta uses two types of viewers:

- Bundled: These viewers are part of Rosetta and can only be viewed by the users. For example, FlexPaper, Book Reader, and JPEG Viewer.
- External: Users can add new viewers as external viewers. For technical details about external viewers, see **External Viewers** on page **69**.

The viewer entity includes the following attributes:

- Name and Description: for identifying the viewer
- URL: for redirecting the files
- Level: IE or file
- VPP (Plugin): The viewer pre-processor. The tool that is used to fetch the files from the storage (operational or permanent) and the metadata (based on the information in the METS XML file) and to prepare it for the viewer, based on the specific capabilities of the viewer.

General IE Viewer for Mixed Content

An enhanced General IE Viewer is used as the default IE viewer for IEs and representations that contain mixed content (for example, sets of research data, audio albums with music files, and images) or in any other case in which there is no commercial (or in-house) viewer that can handle the set of files.

The General IE Viewer is based on the structural map in the METS XML file, and each file can be viewed separately.

The new General IE Viewer looks like the following:

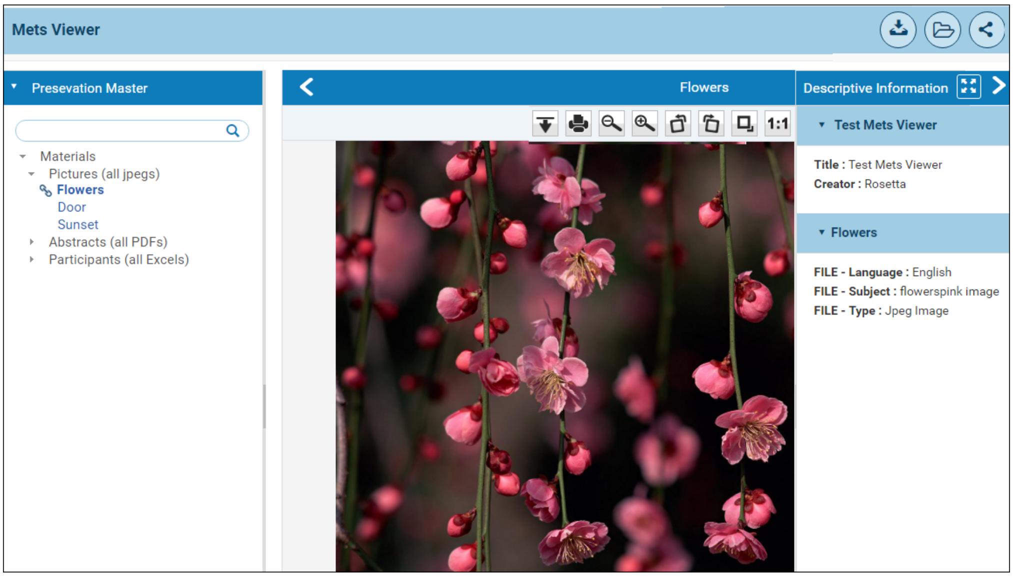


Figure 24: General IE Viewer, Image

The General IE viewer shows one structural map (logical or physical) of one representation at a time. If the General IE viewer receives a list of representations, the representations appear in drop-down drawers on the left pane of the viewer. The user can open each one and select a structural map. The right pane of the viewer displays the descriptive metadata of the file.

From the top-right of the viewer, the user can:

- Click the Download icon to download all of the files in the IE. (For information on configuring the Download icon, see **Representation Profiles** on page 48.)
- Click the Folder icon to open a list of links to the collections associated with the IE. The collection viewer opens in a new tab.
- Click the Share icon to share the delivery URL of the IE.

When more than one copy of a file is associated with a representation, Rosetta provides the means to navigate multiple images in the same object view. Multiple images are associated through a Group ID and can be browsed through the viewer. Their identification codes allow them to retain their association no matter where they may be distributed in the system or an export.

Object viewers have a table of contents in the left column with an link icon next to items containing links to associated objects. Hovering over the links displays links allowing users to browse and link to other representations. Metadata for the files appears in the right pane.

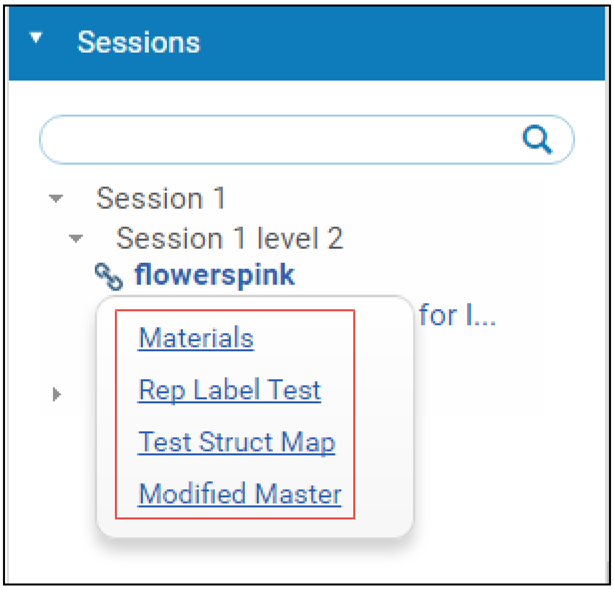


Figure 25: Information for Other Versions

For information on configuring the metadata fields that appear in the General IE Viewer, see the **Metadata Delivery Fields** section of the *Rosetta Staff User's Guide*.

Article Viewer

The Rosetta Article Viewer allows you to view PDFs of scholarly articles in Rosetta, and complies with Google Scholar indexing requirements of article metadata and full text. The viewer uses source MD of type=OTHER and subtype=article, according to the specified structure, to generate HTML meta tags in order to comply with Google Scholar requirements. If no such MD is provided, Rosetta uses specified DC fields.

Scholarly material IEs should all belong to one or more collection. These collections should be exposed to Google using a sitemap with deeplinking URLs (for example: http://rosetta.university.edu:1801/delivery/action/collectionViewer.do?collectionId=15584175).

You must configure the Article Viewer as the delivery method for scholarly material in order for Google crawlers to reach and index it.

General Representation Viewer for Mixed Content

An HTML5 viewer that accepts a single representation (provided by the delivery rule representation profile). It can display only formats that are supported by HTML5. For other formats, the viewer supports download only.

For information on configuring the metadata fields that appear in the General Representation Viewer, see the **Metadata Delivery Fields** section of the *Rosetta Staff User's Guide*.

Photo Album Viewer

The Rosetta Photo Album viewer allows you to view images in photo album style by flipping through images. Supported formats are png, gif, and jpg.

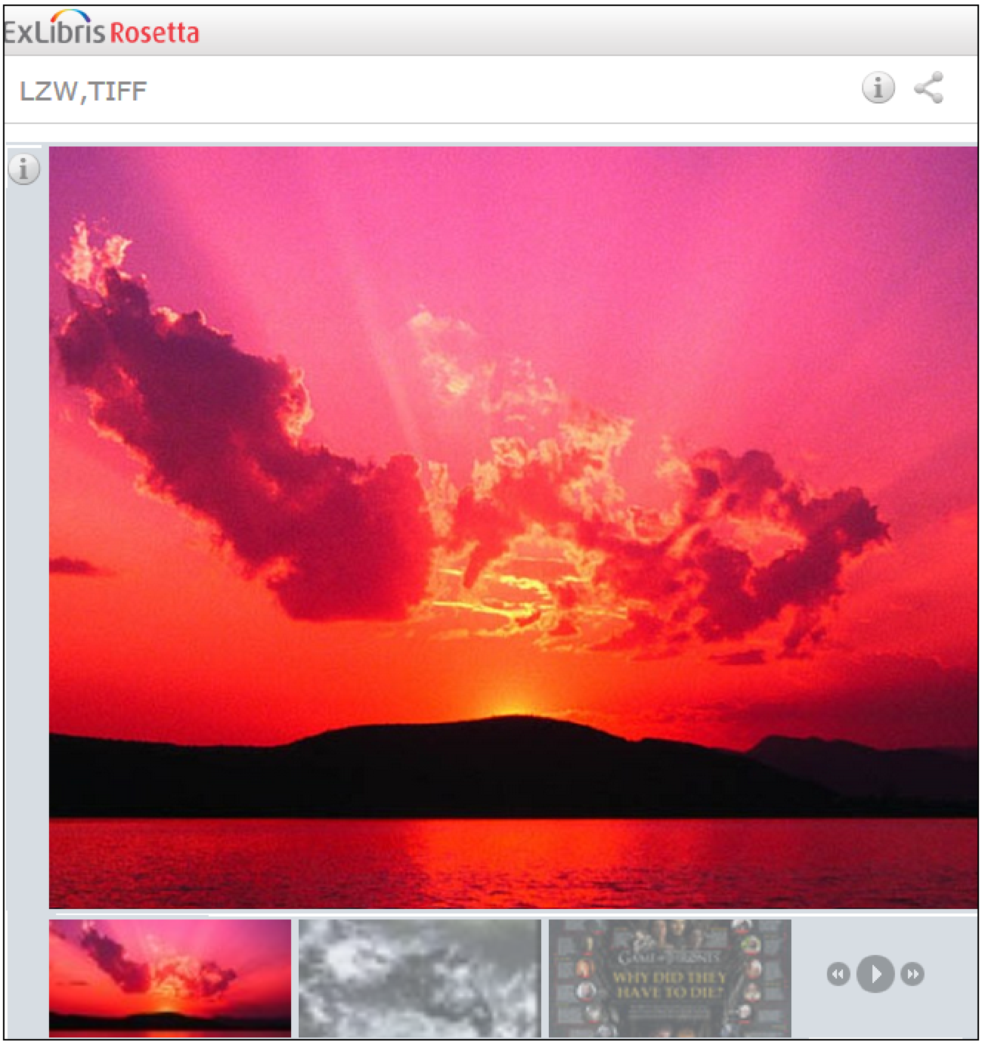


Figure 26: Photo Album Viewer

Universal Viewer

The Universal Viewer has the ability to display and zoom in on high-resolution images and supports formats such as tiff and jpeg2000. To support the Universal

Viewer, Rosetta provides a IIIF image server and publishes a IIIF manifest for representations.

OpenSeadragon Viewer

The OpenSeadragon viewer is a viewer for high-resolution zoomable images.

XSL Viewer

The XSL viewer displays XML files in HTML by using a stylesheet that you can configure.

Embedded Viewers

Rosetta Delivery supports embedding viewers as components in Web pages that display digital objects.

More recently, Rosetta allows configuring the viewers to be embedded in other ways, by setting the parameters of the viewer URL. These parameters control the appearance of the header, toolbar, and footer around the viewer.

When adding to the URL the parameter `embedded=true`, the image appears without the Rosetta header and footer:

Figure 27: Embedded Viewer

To display the object without the title and top toolbar (folder, information, and share icons), an additional parameter of `toolbar=false` must be added to the `embedded=true` parameter (shown above).

dps_func parameter

The `dps_func` parameter is used for getting access to the file(s) without using the Delivery chrome (e.g. header, footer, toolbar, logo, and background colors). It can be used for getting the thumbnail of the IE (`dps_func=thumbnail`) or the file itself streamed to the user's browser (`dps_func=stream`).

NOTE:
The list of parameters for some of the viewers are documented in **Viewer Parameters** on page **60**.

Image-Based File Viewer

When the IE or representation contains a single file, this file is displayed without the tree structure on the left.

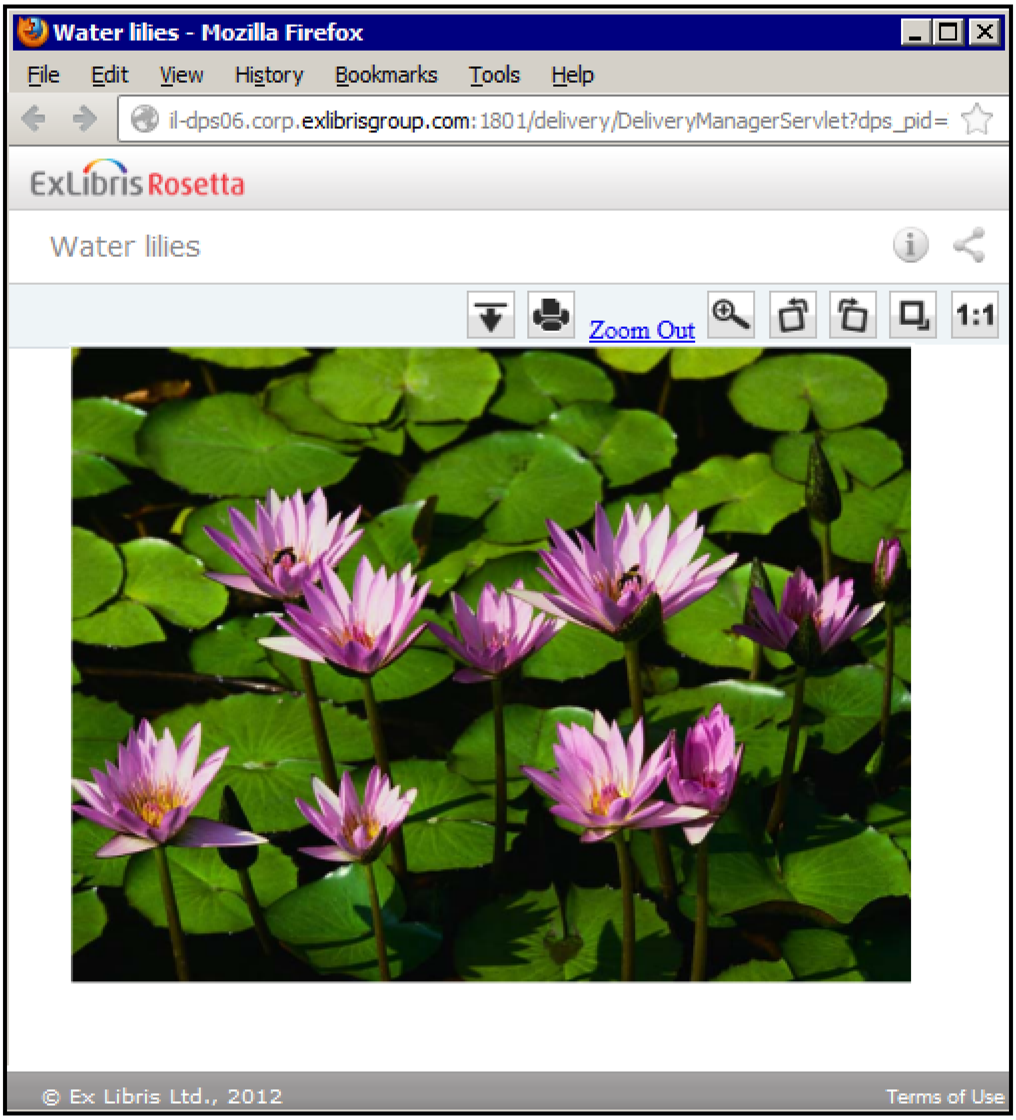


Figure 28: Image-Based File Viewer

This viewer displays image files and enables users to perform the following actions on the image:

- Zoom in and out
- Rotate 90 degrees in either direction
- Display image metadata
- Open a print-friendly version of the image in a new browser window by clicking the print icon on the toolbar
- Save a copy of the image to their own local or network drive using the download button beside the print button.

Jpeg2000 Viewer

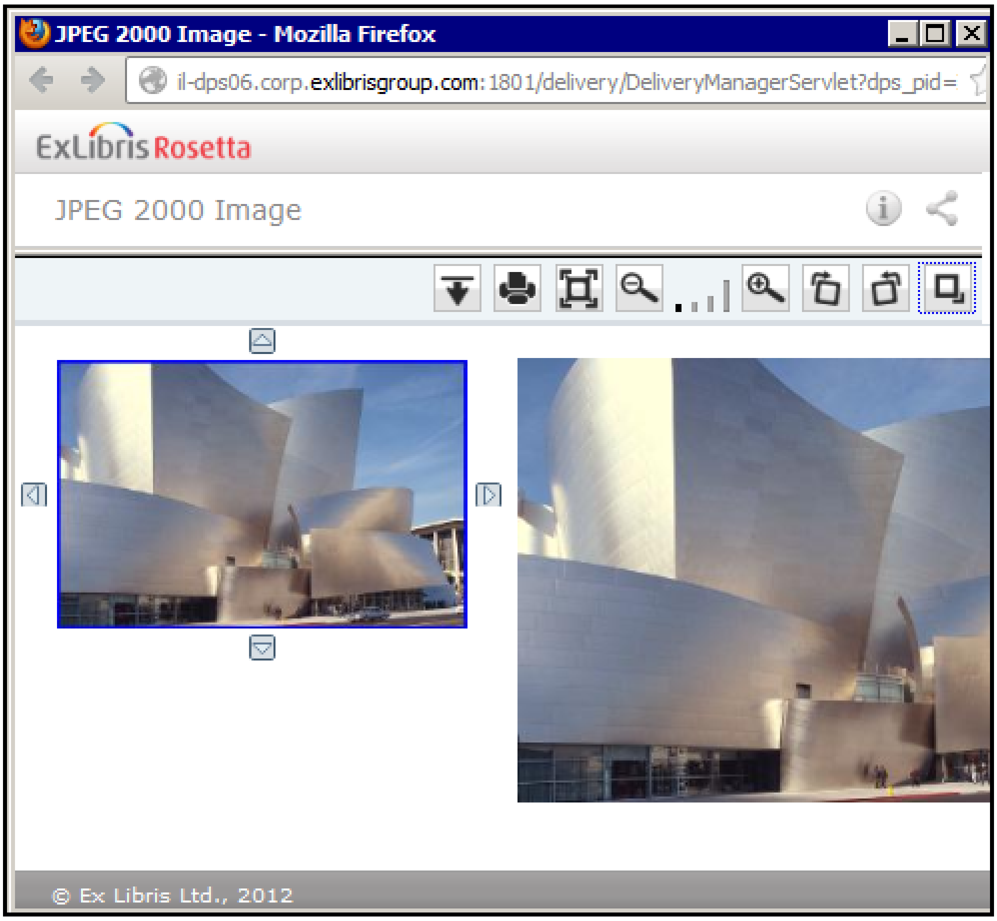


Figure 29: Jpeg2000 Viewer

This viewer displays image files that are stored in the JPEG2000 format. In addition to the actions provided by the image-based file viewer (see **Image-Based File Viewer** on page **56**), content consumers can view the image thumbnail and select an image area to be enlarged.

Web Browser-Based File Viewer

If there is no viewer that supports the file format of the delivered file, the file is streamed to the browser and the user can download it or use a plug-in on the local computer to render the file. For example, Office documents are streamed to the user's browser for download and opened locally on the user's PC.

Customizing the Viewer Header

Delivery viewers use the logo and background colors specified for the IE's institution. For information on how logos and colors are associated with institutions, see **UI Customization Per Institution** on page **222**.

Delivery Parameters

The following table describes delivery parameters for URL viewers. These parameters can be added either to the Delivery URL or as the Viewer parameters in the Delivery rule. With the exception of the list specified in the table below, any querystring parameter can be appended to the delivery request (either directly on the request URL or via the delivery rules) and is forwarded to the viewer.

Table 4. Delivery URL Parameters

Parameters	Level	Result
toolbar=true	IE/Rep/File	Default settings including: ■ Header ■ Toolbar ■ Viewer iFrame ■ Footer
embedded=false	IE/Rep/File	Default settings including: ■ Header ■ Toolbar ■ Viewer iFrame ■ Footer
toolbar=false AND embedded=true	IE/Rep/File	IFrame with only keep-alive functionality and the Viewer IFrame
dps_func=stream	File	Stream file
dps_func=thumbnail	IE/Rep/File	Stream thumbnail directly
dps_frame	IE/Rep/File	When false, redirection to an external viewer does not include a Rosetta wrapper. **NOTE:** The number of concurrent users is not checked when set to `false`. Access rights policies that are based on this condition will pass.
dps_func=mets	IE	METS XML

Viewer Parameters

The following table describes the parameters for the General IE viewer:

Table 5. General IE Viewer Parameters

Name	Default Value	Description
AUTOMATIC_LOADING	True	When opening the IE Viewer, the first file will not be delivered. Can be used when a thumbnail is preferred, or when files are exceptionally large and the user is not expected to necessarily request the first file.
use_arrows	True	Can be used to hide arrows that allow navigation between files in a representation, specifically when the file viewer functionality is affected by their presence.
dps_file={file PID}	First file of the IE	When provided, the viewer opens the requested IE/REP at the requested file.

The following table describes the parameters for the General Representation Viewer:

Table 6. General Representation Viewer Parameters

Name	Default Value	Description
dps_file={file PID}	First file of the Representation	When provided, the viewer opens the requested REP at the requested file.

The following table describes the parameters for the XSL Viewer.

Table 7. XSL Viewer Parameters

Name	Default Value	Description
xsl_file		The XSL stylesheet used to display XML files.

The following table describes the parameters for the FlexPaper Viewer.

Table 8. FlexPaper Viewer Parameters

Parameter	Default Value	Description
read_only	false	When read_only=true, the FlexPaper viewer opens without print functionality. OTB remains with print functionality ('read_only=false').

The following parameters apply to the Video Player Viewer.

Table 9. Viewer Parameters: Video Player - JWPlayer

Name	Description	Example
Volume	The volume the player will start playing. Default value is 50 and it can be between 0 and 100.	volume=75
autoStart	By default you need to press play for a file to start playing. By setting this parameter to true, the file starts playing automatically on load, and if there's a playlist the next file will automatically start after the previous one has finished.	autoStart=True
Metadata	A Boolean value indicating whether or not to activate the metadata plugin that creates a sidebar showing the metadata extracted on the fly. To see its affect add: "metadata=true" to the url.	metadata=true
audioView	By default the audio viewer will only display the player tray. To view visualization effects for audio file playback set this parameter to true.	audioView=true

Table 9. Viewer Parameters: Video Player - JWPlayer

Name	Description	Example
skin	The design of the viewer. the following skins are supported by Rosetta: ■ kleur.zip ■ vector01.zip ■ niion.zip ■ moderngreen.zip ■ anoto.zip ■ cassette.zip ■ jump.zip ■ yellowish.zip ■ nature01.zip ■ videosmartclassic.zip ■ nexus.zip ■ grungetape.zip ■ snel.zip ■ fs40.zip ■ playcasso.zip	skin=kleur

The following table describes delivery parameters for JPEG viewers.

Table 10. JPEG Viewer Parameters

Parameter	Default Value	Description
best_fit	true	Adjustments to the JPEG to best fit the dimensions of the output screen on which the image is viewed.
compression_rate	10	Applied when viewer is used to deliver an image that is not a native JPEG (for example, TIF).

The following parameters apply to the photo album viewer.

IMPORTANT:
The Photo Album viewer is strict regarding parameter syntax. For example, no spaces are allowed around the equal sign, and the parameter value must be quoted with single quotation marks.

Table 11. Viewer Parameters - Photo Album

Name	Default Value	Description
transition_speed	2000	Duration of panel/frame transition (in milliseconds)
transition_interval	2000	Delay between panel/frame transitions (in milliseconds)
easing	swing'	Easing method is used for animations (jQuery provides 'swing' or 'linear', more available with jQuery UI or Easing plugin)
show_panels	true	Flag to show or hide panel portion of gallery
show_panel_nav	true	Flag to show or hide panel navigation buttons
enable_overlays	true	Flag to show or hide panel overlays
panel_width		Width of gallery panel (in pixels)
panel_height		Height of gallery panel (in pixels)
panel_animation	slide	Animation method for panel transitions (crossfade, fade, slide, none)
panel_scale	crop	Cropping option for panel images (crop = scale image and fit to aspect ratio determined by panel_width and panel_height, fit = scale image and preserve original aspect ratio)
overlay_position	top	Position of panel overlay (bottom, top)
pan_images	true	Flag to allow user to grab/drag oversized images within gallery
pan_style	drag	Panning method (drag = user clicks and drags image to pan, track = image automatically pans based on mouse position

Table 11. Viewer Parameters - Photo Album

Name	Default Value	Description
pan_smoothness	15	Determines smoothness of tracking pan animation (higher number = smoother)
start_frame	1	Index of panel/frame to show first when gallery loads
show_filmstrip	true	Flag to show or hide filmstrip portion of gallery
show_filmstrip_nav	true	Flag indicating whether to display Navigation buttons
enable_slideshow	true	Flag indicating whether to display slideshow play/pause button
autoplay	false	Flag to start slideshow on gallery load
show_captions	true	Flag to show or hide frame captions
filmstrip_size	3	Number of frames to show in filmstrip-only gallery
filmstrip_style	scroll	Type of filmstrip to use (scroll = display one line of frames, scroll filmstrip if necessary, showall = display multiple rows of frames if necessary)
filmstrip_position	bottom	Position of filmstrip within gallery (bottom, top, left, right)
frame_width	164	Width of filmstrip frames (in pixels)
frame_height	80	Width of filmstrip frames (in pixels)
frame_opacity	0.5	Transparency of non-active frames (1.0 = opaque, 0.0 = transparent)
frame_scale	crop	Cropping option for filmstrip images (same as above)
frame_gap	5	Spacing between frames within filmstrip (in pixels)
show_infobar	false	Flag to show or hide info bar
infobar_opacity	1	Transparency for info bar

The following parameters apply to the JP2000 viewer.

Table 12. Viewer Parameters - JP2000 Viewer

Parameter	Default Value	Description
read_only	false	When read_only=true, the download and print buttons are hidden.

About Viewer Preprocessors

To display content successfully, viewers (especially third-party viewers) can impose special requirements on content, such as format or file location. For example, if a content consumer requests XML content, an XSL transformation must be performed in order to show the content in a Web browser.

To enable correct display of any content, the Rosetta system prepares the content using viewer preprocessors, which are implemented as plug-ins.

The table below describes the viewer preprocessors that the Rosetta system uses:

Table 13. Viewer Preprocessors

Viewer Preprocessor	Used When...
J2KViewerPreProcessor	A JPEG image is to be displayed in the Jpeg2000 viewer. The Jpeg2000 viewer requires an image to be stored in a certain location. The J2KViewerPreProcessor stores the image in a location that can be accessed by the viewer. The preprocessor then generates a URL and forwards it to the Jpeg2000 viewer.
JpegViewerPreProcessor	A JPEG image is to be displayed in the Jpeg2000 viewer, but conversion to JPEG is required. In addition to the capabilities provided by the J2KViewerPreProcessor, the JpegViewerPreProcessor can convert graphic formats (such as TIFF, BMP, and GIF) to JPEG.
XSLViewerPreProcessor	An XML file is to be displayed in a Web browser. This viewer preprocessor performs XSL transformation of XML files to HTML that is displayed in a Web browser.
DefaultViewerPreProcessor	The requested content can be displayed in a Web browser without any additional transformation.

Table 13. Viewer Preprocessors

Viewer Preprocessor	Used When...
FullTextViewerPreProcessor	Converts all PDF files in representation into a single HTML file. Use with the StreamGate viewer to provide a fulltext representation to a harvester (for example, Primo).

Viewer preprocessors are provided with the Rosetta system as a part of installat ion. New preprocessors can be added as plug-ins via the plug-in management UI.

5

Deposits

This section contains:

Automatic Decomposition Rules

Rosetta automatically determines whether a given compressed file should be extracted in accordance with the automatic decomposition rules set in the system.

To set the automatic decomposition rules, do the following:

1 Click the **Deposit** link from the Advanced Configuration page.

The Deposit configuration page opens.

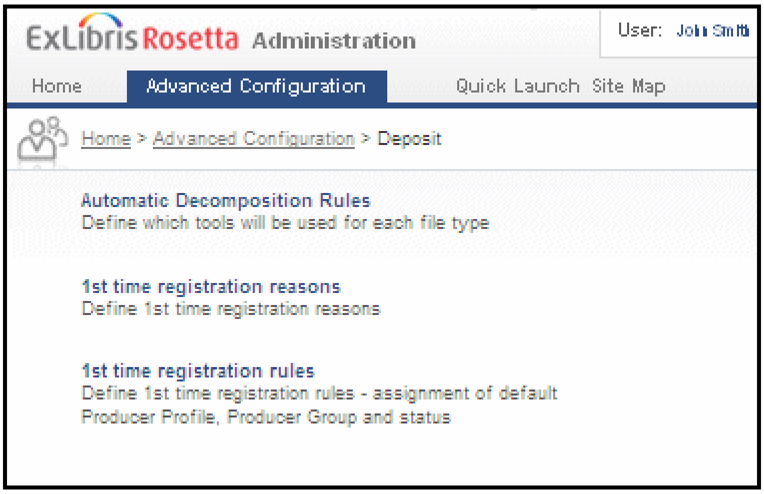


Figure 30: Deposit Configuration Page

2 Click the **Automatic Decomposition Rules** link.

The Rule List page opens.

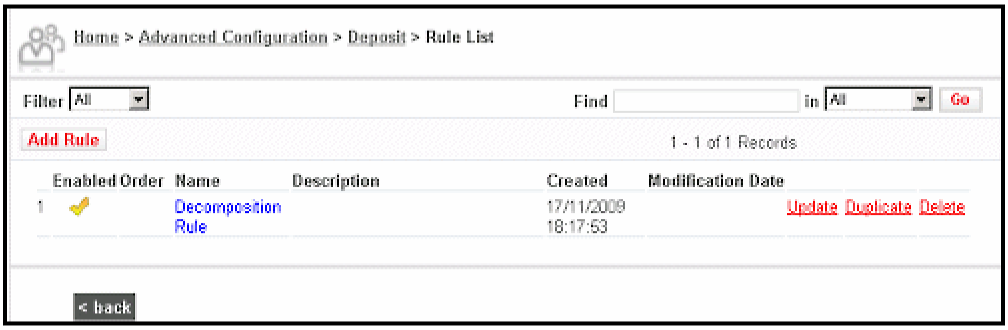


Figure 31: Rule List Page

This page lists all existing automatic decomposition rules.

3 Perform one or more of the following actions. To

- filter the list by status, select the required status from the **Filter** drop-down list (Active or Inactive).
- add a new rule, click the **Add Rule** button.
- edit an existing rule, click the **Update** text of the rule's row.
- duplicate an existing rule, click the **Duplicate** text of the rule's row.
- delete a rule, click **Delete** on the rule's row and confirm the deletion.

For adding, editing, or duplicating a rule, the Rule Details page opens.

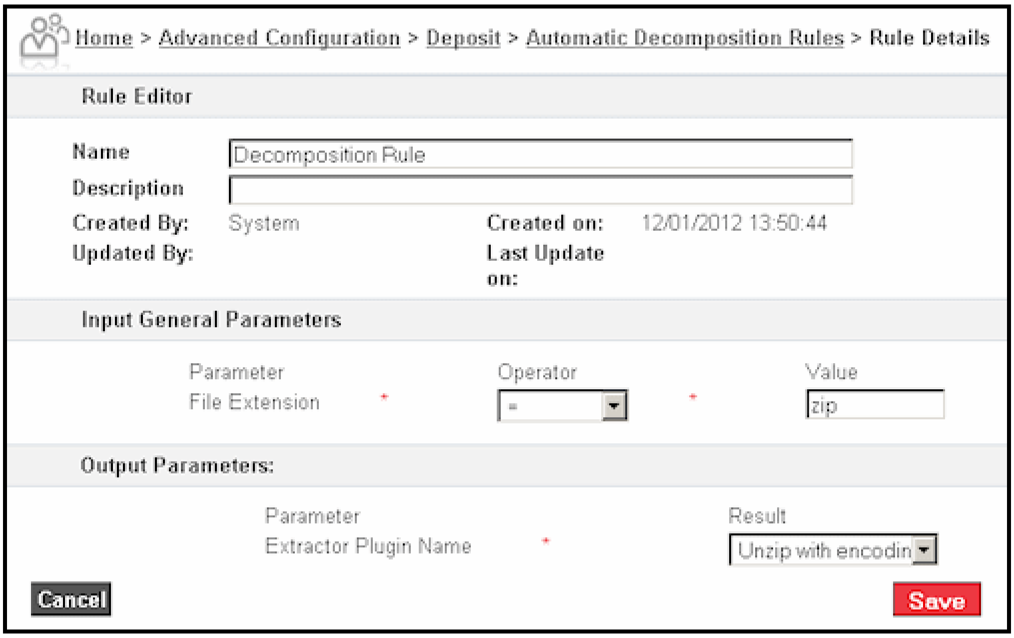


Figure 32: Rule Details Page

4 Enter or edit the details of the rule:

   a In the Rule Editor pane, a name and a description

   b In the Input General Parameters pane, the extension of the file you want to be automatically extracted in the **Value** field.

   c Select the appropriate operator from the **Operator** drop-down list (InList, Contains, or =). For detailed instructions and explanations of operators, see **Operators Used in Rule Parameters** on page 48.

   d In the Output Parameters pane, select the desired result from the **Result** drop-down list.

5 Click **Save**.

   The Rule List page opens. The new rule appears in the list.

6 To edit an existing rule, click **Update**.

   The Rule Details page opens.

7 Enter the updated details of the rule as described in Step 4.

8 Click **Save**.

   The Rule List page opens. The rule has been updated.

Registration Rules

When a new Producer is registered in the Rosetta system, the system automatically assigns a Producer profile, Producer group, and status to the new user. Administrators can configure this assignment during advanced configuration using the Deposit Registration Rules mapping table (below).

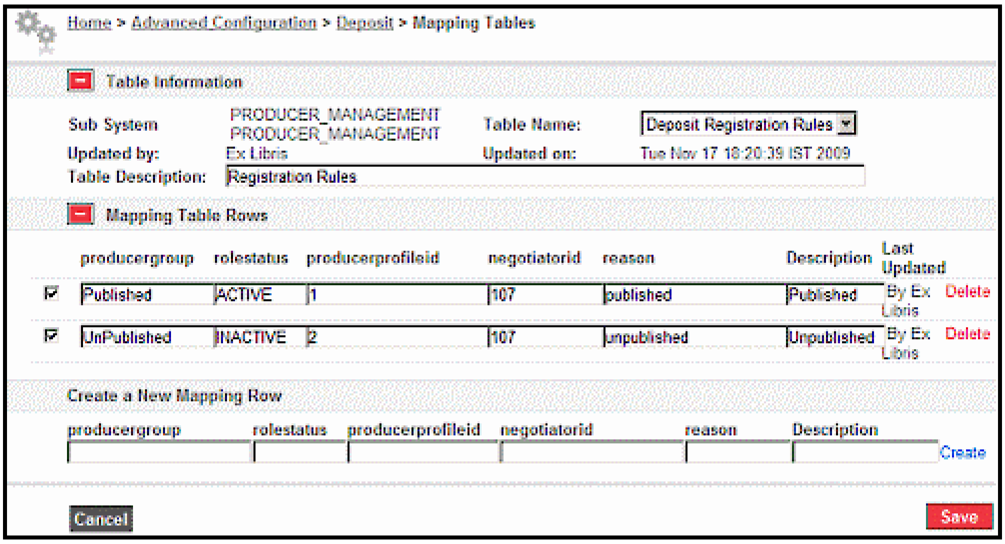


Figure 33: Deposit Registration Rules Mapping Table

To access this page, from the Advanced Configuration page, click **Deposit > 1st-Time registration rules**. The mapping table for Deposit Registration Rules opens.

Administrators can work with the Deposit Registration Rules mapping table as described in **Working with Mapping Tables** on page 232.

6

E-mail Notifications

This section contains:

E-mail Notifications for Deposit Activity

Rosetta e-mails a report on deposit activity for a given Producer's account when two conditions are met:

1. The Producer or a Negotiator registers the Producer and signs the Producer up to receive regular reports.

   This condition is met when a Producer self-registers or when a Negotiator registers a Producer. See **Add Producer Account Process** on page **218**.

2. A Negotiator activates these reports from the back office and sets the start date and the frequency for all Producer reports in the system. See **Modifying the Producer Report Job** on page **247**.

Digital Signature

To use a digital signature on e-mail communications, set up the feature as follows:

Obtain the certificate through an external certificate of authority (CA).

Copy the certificate to Rosetta deposit server. Configure the following parameters:

- `digital_certificate`: the location of the certificate
- `digital_certificate_password`: the password for the certificate
- `digital_signature`: flag to turn on/off the digital signature

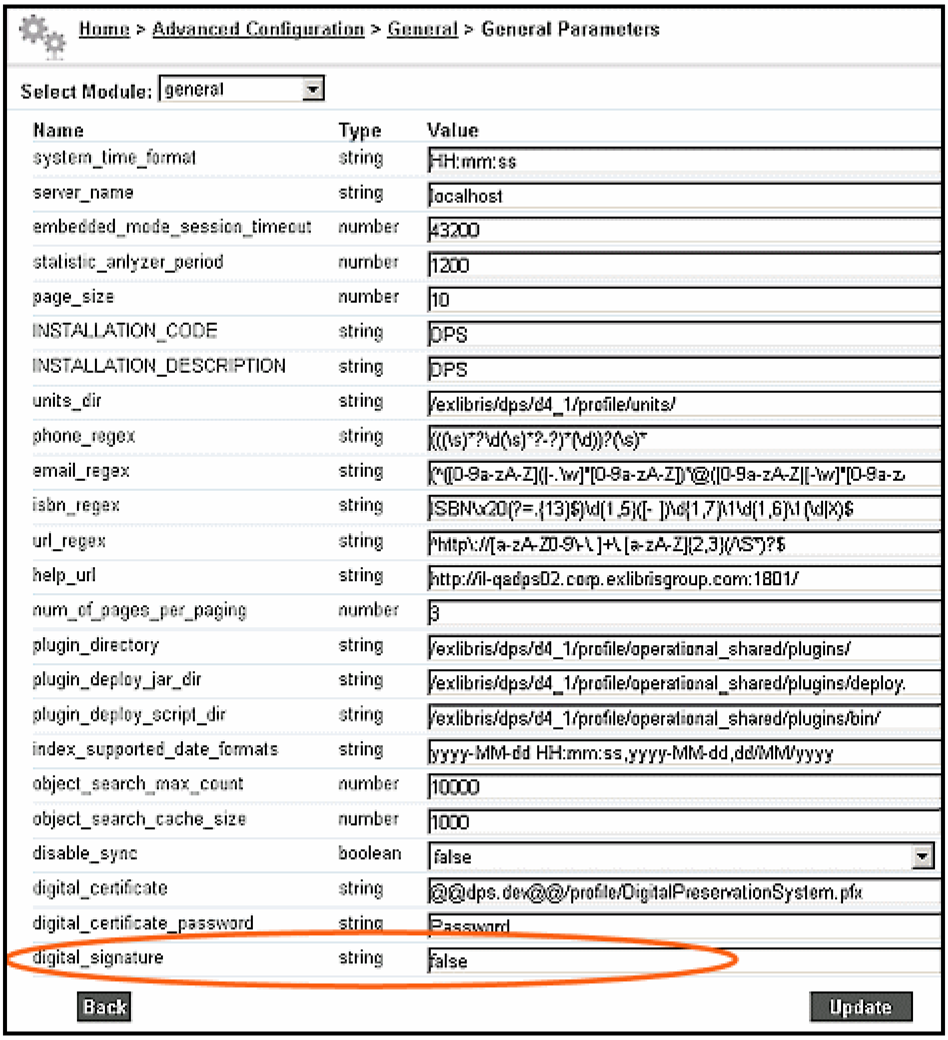


Figure 34: Digital Signature Option on General Parameters Page

7

Repository-Related Configurations

This section contains:

Tasks, Task Chains, and Processes

This section contains:

Introducing Process Management

After Producer Agents deposit their content to the Rosetta system, the system performs various operations to process this content. Administrators can control the processing by configuring processing operations and defining content that must be processed.

The Rosetta system organizes the processing operations as follows:

- **Tasks**: individual content-processing operations that the system performs, such as persistent identifier generation and technical metadata extraction.

  Tasks are implemented as Java classes, which are provided with the Rosetta system.

  Administrators can monitor how the tasks are being performed. (For more information on monitoring tasks, see **Part VI, Data Managers**, of the *Rosetta Staff User's Guide*.)

- **Task chains**: an ordered series of tasks that the Rosetta system performs.

  Task chains are created and configured by Administrators.

  In addition, several common task chains (such as validation stack) are predefined in the Rosetta system.

- **Processes**: task chains that the Rosetta system performs on a set of objects.

  Processes are created and configured by Administrators. (For more information on configuring processes, see **Managing Processes** on page **81**.)

Managing Tasks

This section contains the following topics:

About Tasks

A task is an external utility used by Rosetta to manipulate objects stored in the system. (For more information about utilities, see **Utilities and Files** on page **94**.) Each task works on one IE at a time.

Tasks cannot be created through the UI. However, some tasks can be configured by users and have different parameters.

Some tasks are built around software plug-in tools, and users can install new plug-ins to be used by existing tasks.

The Create Derivative Copy task uses the migration plug-in mechanism to create derivative copies out of preserved files. See **Utilities and Files** on page **94** below for information about how to configure this task.

Examples of tasks are as follows:

- Tasks using plug-ins – Technical metadata extraction, Generic DOI generator
- Tasks not using plug-ins – CMS update task, Export IE

- Create Derivative Copies tasks using tools that are not managed as plug-ins: Tools managed using a mapping table and set of rules.

The following table describes the list of tasks delivered with Rosetta. Where parameters are required, the user must enter them.

Tasks and their descriptions appear on the Task List page when you add a task to a task chain (**Home > Advanced Configuration > Repository > List of Task Chains > Task List**).

Administrators can combine tasks into task chains. (For more information about task chains, see **Tasks, Task Chains, and Processes** on page 73 and **Managing Processes** on page 81.)

About Task Chains

Task chains are added, updated, and deleted by the System Administrator and used by Data Managers when they run processes.

Task chains can include one or more tasks. The System Administrator can set the order of tasks in the chain, so one task will be based on the results of another.

NOTE:
Task chains and the tasks that comprise them are available depending on the object level on which you are working. For example, access rights task chains will be available to IEs and Representations but not to files.

Task chains are categorized into groups, the purpose of which is twofold:

1. Order of task chains – The groups are used for better management of the task chains. The ordering of the task chains into categories can be reflected in reports.
2. Validation and prioritization purposes – The task chain group can be used to validate which task chain will be available to the users in the UI. For example, only task chains that belong to the Validation Stack group can be used in the validation stack phase. In addition, the system can manage the priority of a task chain by the process automation module based on the groups (for example, task chains that belong to the Validation Stack group will have a higher priority than the Maintenance task chains).

The groups are as follows:

- Validation Stack – Task chains that belong to this group are available for selection in the SIP processing configuration to be used in the validation stack stage.
- Web Editor Staging – Task chains in this group are available for the 3A users (Approver, Assessor and Arranger) as services when opening a SIP during the assessment phase of the SIP processing.
- Preservation – Task chains in this groups can be categorized as Preservation.

- Maintenance – Task chains in this group are available for selection in Processes in the Data Management area.
- Web Editor Permanent - Task chains in this group are available for the Editors and Data Managers as services when opening an IE in the permanent repository.
- Metadata Validation - Task chains in this group can be categorized as metadata validation.
- Enrichment - Task chains that belong to this group are available for selection in the SIP processing configuration to be used in the Enrichment phase.

Task chains and their descriptions can be found on the Task Chain List page.

Task Chain List page

Task chain groups appear on the Task Chain List page. To access this page, click the **Repository** link on the Advanced Configuration page, then click the **List of Task Chains** link. The Task Chain List page opens (see below).

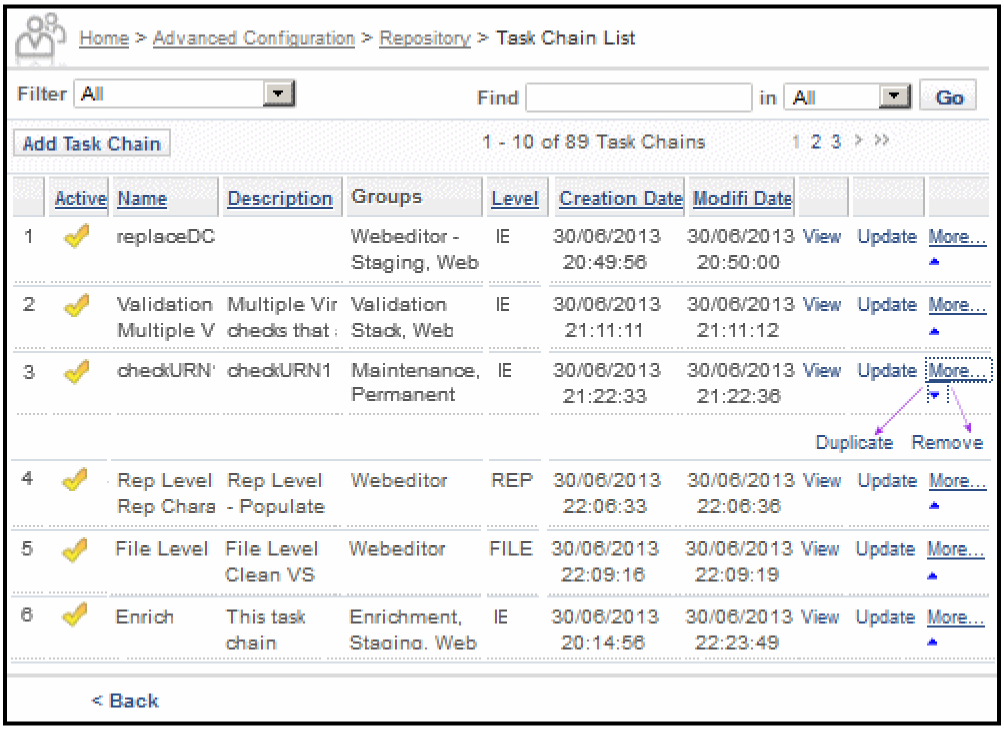


Figure 35: Task Chain List Page

Adding and Editing Task Chains

New task chains can be create by clicking the **Add Task Chain** button on the Task Chain List page, then entering values in the fields on the Task Chain

Details page (see below). You can also edit existing task chains by clicking the **Update** link of the task chain's row. To create a task chain based on an existing task chain, click the **Duplicate** link of the task chain's row.

To create or edit a task chain:

1. From the Advanced Configuration page, click **Repository > List of Task Chains**.

   The Task Chain List page opens (see **Figure 35**).

2. Click the button that describes what you want to do: **Add Task Chain**, **Duplicate** (an existing task chain), or **Update** (an existing task chain).

   The Task Chain Details page opens (see **Figure 36**). For new task chains, the fields are empty. For updates or duplicates, most or all of the fields have entries.

3. Enter information in the fields or change information, as needed:

   - Enter a name for the task chain and a description for what it does.
   - Select a Status (active or inactive) from the drop-down list.
   - Select the object level (IE, File, or Representation) to which you want this task chain to apply.
   - Select the group(s) to which this task chain applies.

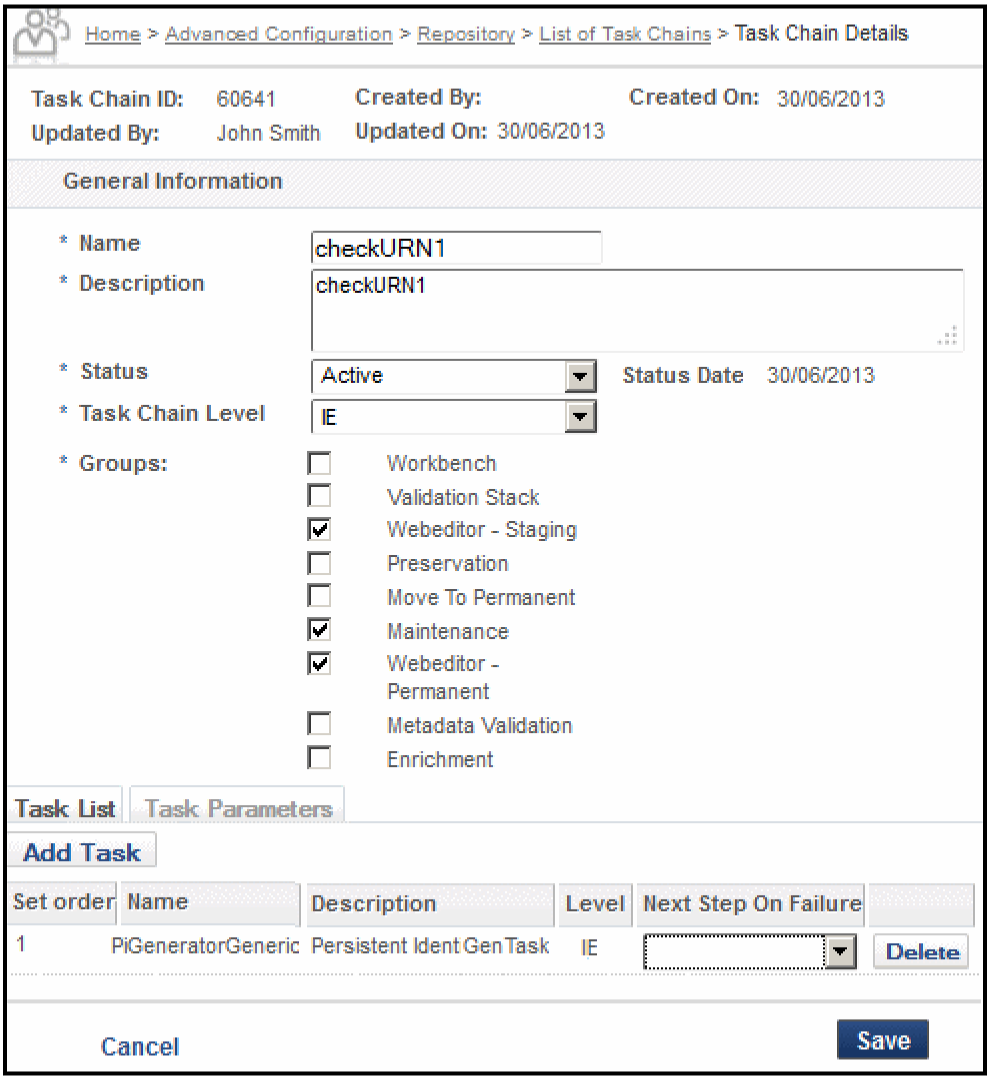


Figure 36: Task Chain Details page, update mode

4 To assign a task to the chain, click the **Add Task** button.

The Task List page opens with a list of all available tasks.

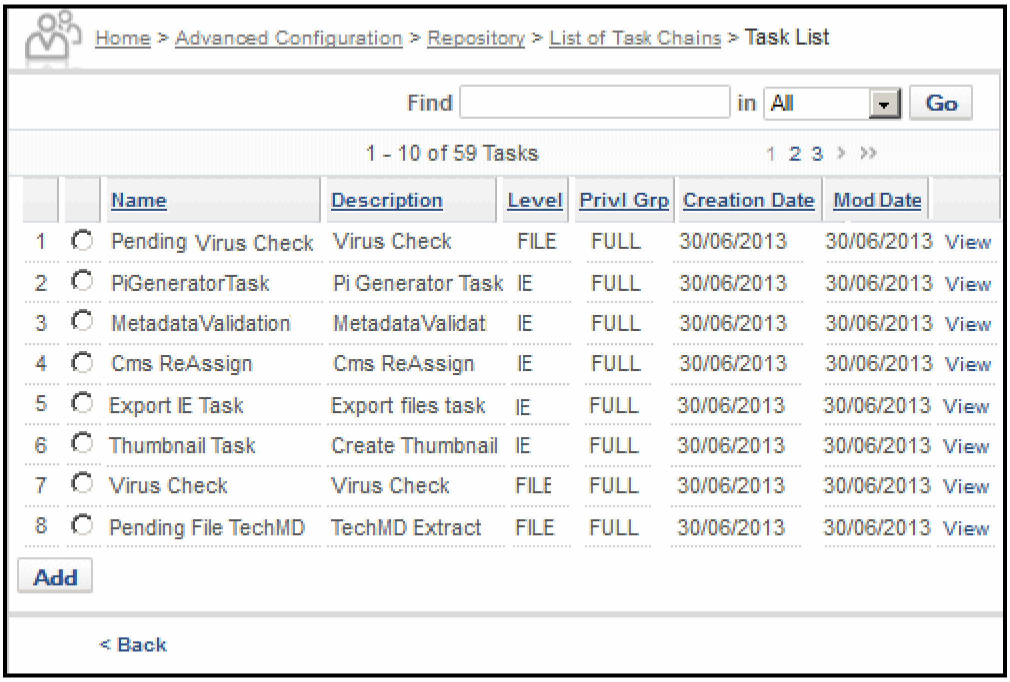


Figure 37: Task List Page

5 Browse or search the Task List page for the task you want to add. When you find it, select it and click the **Add** button.

The task appears below the **Task List** tab on the Task Chain Details page. Repeat the steps for adding a task as needed.

6 For each task you have added to the list:

- Use the **Set order** up and down arrows to change the order of tasks that the task chain performs.
- Select **Next** or **End** for Next Step On Failure. This determines what the chain will do if this task fails, continue to the next task (**Next**) or finish (**End**).

NOTE:
This setting only determines the behavior between tasks and not the behavior of the taskchain itself, which fails in the event of any task failure.

- To delete a task from the task list, click the **Delete** text in the task's row.

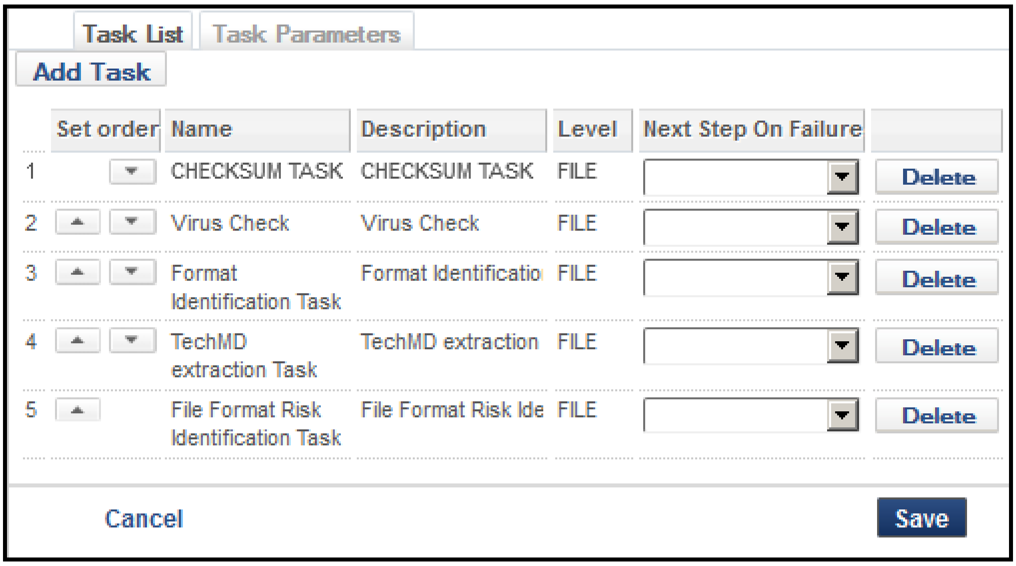


Figure 38: Task List for File-Level Task Chain

7 Click the **Task Parameters** tab and enter any parameters needed for the tasks you chose.

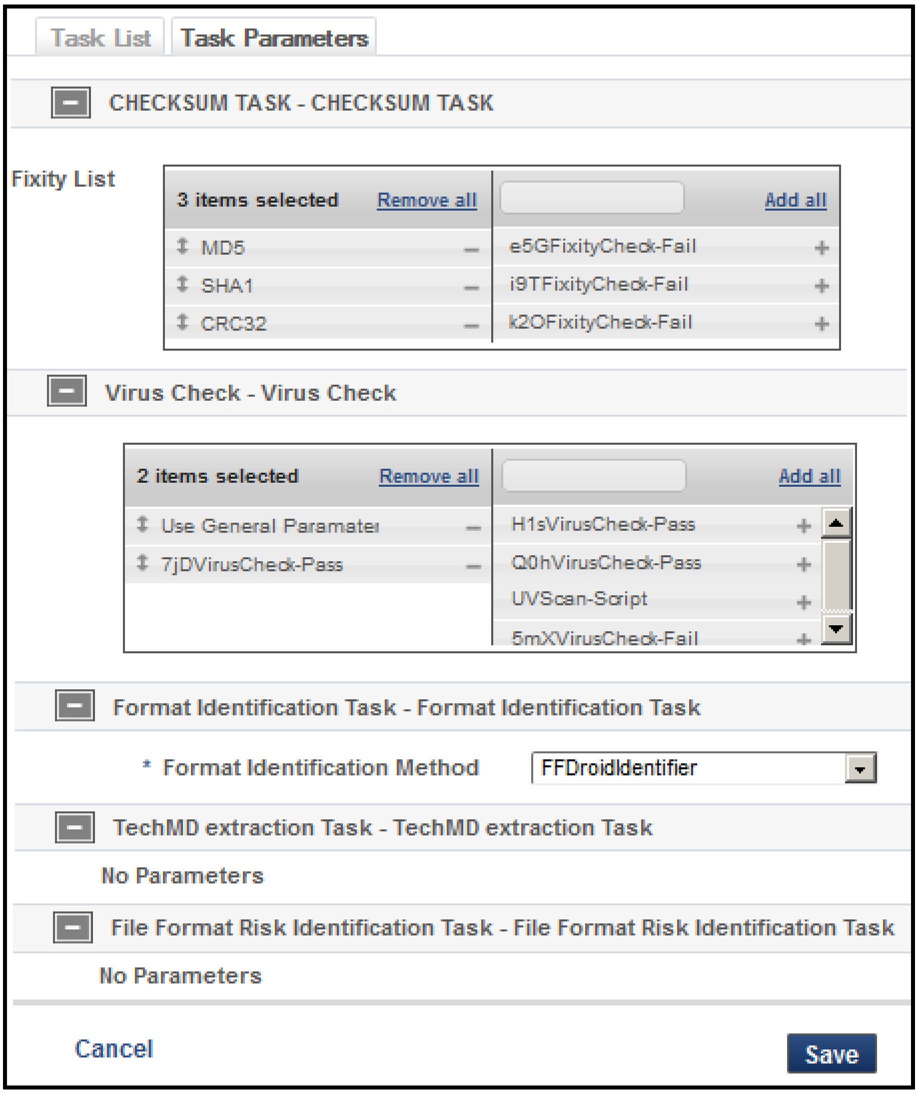


Figure 39: Parameters for All Tasks Associated with the Task Chain

8 When you have set up the tasks and parameters for the task chain, click the **Save** button on the Task Chain Details page.

Your new or edited task chain appears on the Task Chain List page.

Managing Processes

This section contains the following topics:

- **Updating Process Scheduling** on page 86
- **Updating Sets in a Process** on page 87

About Processes

A process is a task chain that the Rosetta system performs on a set of objects. Authorized users can manage processes by selecting a task chain and a set that exist in the system.

Accessing the Process List Page

The Process List page enables staff users to work with processes. This includes adding and scheduling processes.

To access the Process List page:

Click the **Data Management** link on the Management Home page, then click **Manage Processes**. The Process List page opens.

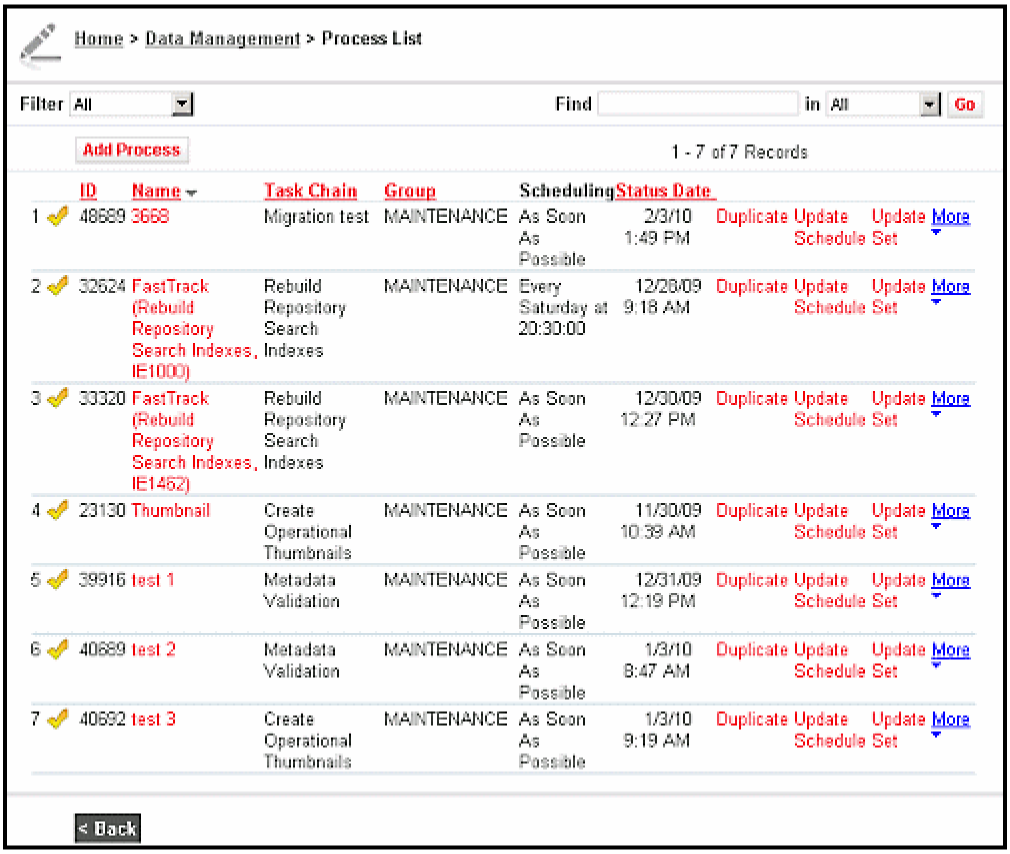


Figure 40: Process List Page

The Process List page contains a filter and a simple search, basic information about each process, and a series of actions the user can perform (such as duplicating the process or updating the schedule or set). The **More** text in the final column provides additional actions that can be performed.

Creating a New Process

Administrators can create a new process to define the actions that the Rosetta system must perform on a specified set of objects. Adding a process consists of the following steps:

1. Selecting the task chain that contains the tasks to be performed
2. Specifying general information about the process (such as the name of the process)
3. Defining the set of objects on which the Rosetta system must perform the tasks defined in the task chain
4. Scheduling the process

To create a new process:

1. On the Process List page (**Data Management > Manage Processes**), click **Add Process**. The Choose Task Chain page opens.

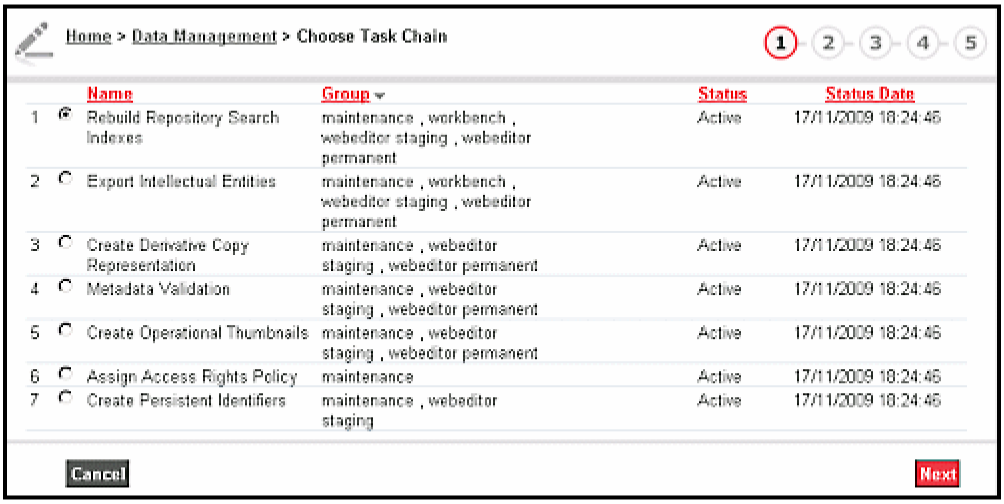


Figure 41: Choose Task Chain Page

2. From the list of task chains, select the task chain you want to add.
3. Click **Next**. The Complete Parameters page opens.

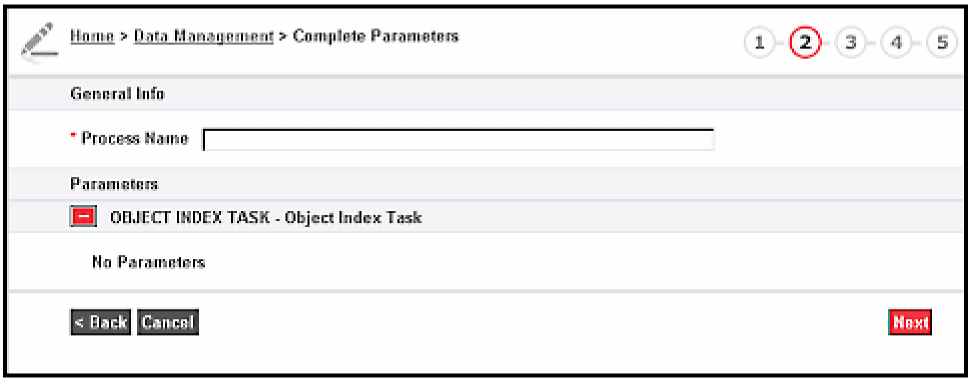


Figure 42: Complete Parameters Page

4 In the **Process Name** field, enter the name of the process.

5 In the **Parameters** pane, complete the fields as required.

NOTE:
In the **Parameters** pane, the fields are generated dynamically, based on the task chain configuration.

6 Click **Next**. The Define Set page opens.

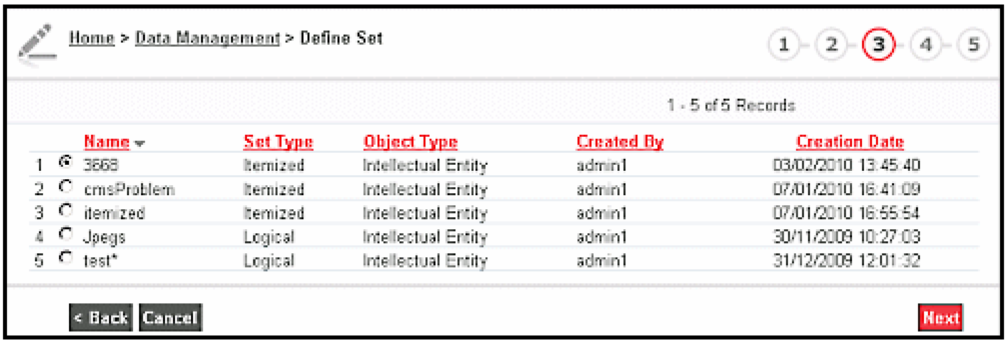


Figure 43: Define Set Page

7 In the list of sets, select the set you want to add.

8 Click **Next**. The Scheduling page opens.

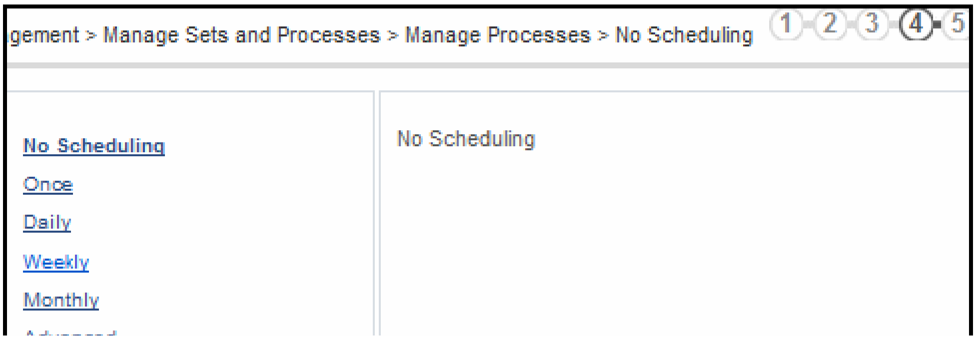


Figure 44: Scheduling Page

9 Schedule the process executionby clicking one of the following options:

- **Scheduling - Once**
- **Scheduling - Daily**
- **Scheduling - Weekly**
- **Scheduling - Monthly**

Fields for the option you select display in the right pane.

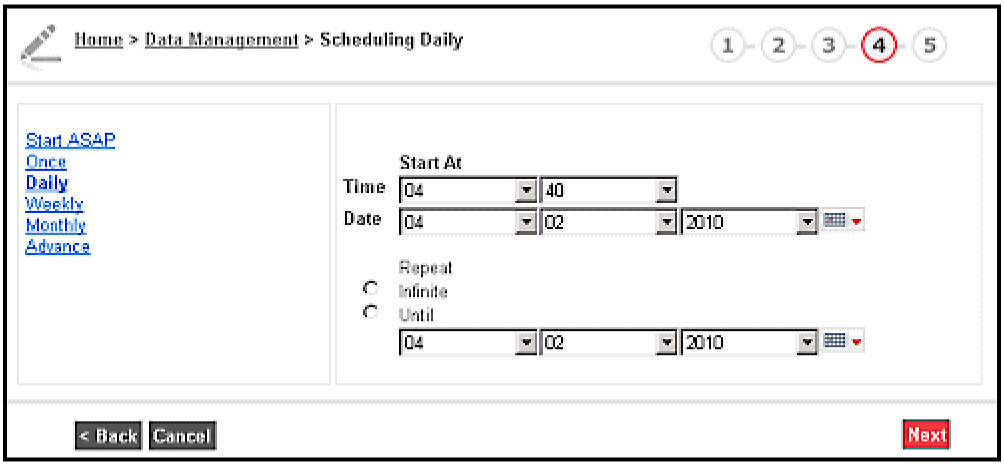


Figure 45: Scheduling - Daily

10 Provide the rest of the information as required.

11 Click **Next**. The Confirmation page opens.

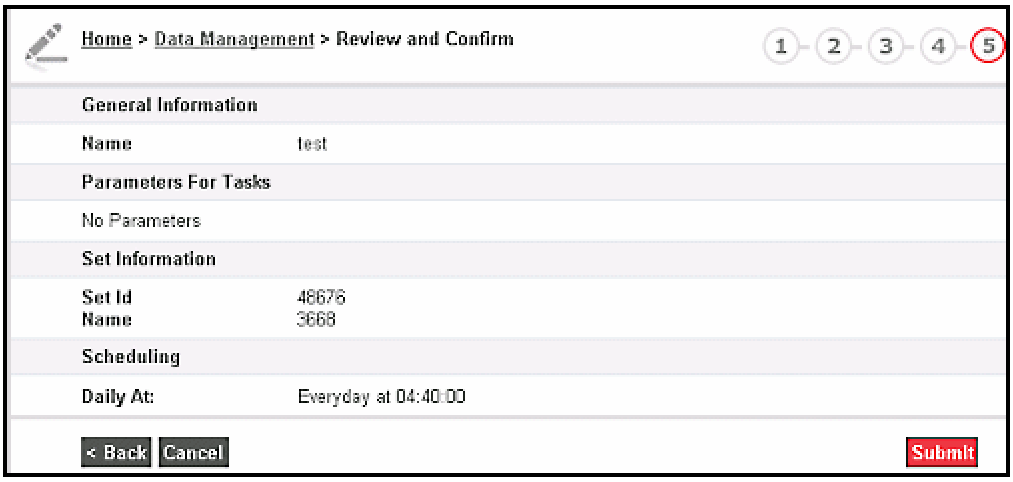


Figure 46: Confirmation Page

12 Review the information on the Confirmation page and do one of the following:

- If the information is correct, click **Submit**. The process is created and the Process List page opens.
- If the information is not correct, click **Back** to return to the previous page to make the necessary changes.

The process is saved in the Rosetta system, which performs the process as scheduled.

Updating Process Scheduling

The Rosetta system performs processes as scheduled by staff users. Staff users can update process scheduling at any time.

To update process scheduling:

1 On the List of Processes page (see **Accessing the Process List Page** on page 82), locate the process whose scheduling you want to change.

2 If you see a linked text to **Update Schedule** in the corresponding row, click it. If you don't see the link, click the **More** text link and the **Update Schedule** link will appear. Click it.

The Scheduling page opens to the current interval and entries.

3 Select the new scheduling frequency, if needed, and enter new details in the corresponding form that opens. (See **Creating a New Process** on page 83 for options.)

4 Click the **Save** button.

The Rosetta system will perform the process according to the new schedule.

Updating Sets in a Process

Administrators can change the sets of objects on which the Rosetta system performs tasks that are defined in the task chain.

To update sets in a process:

1. On the Process List page (see **Accessing the Process List Page** on page **82**), locate the process whose sets you want to change and click **More**. Additional options are displayed.
2. Click **Update Set**. The Define Set page opens.
3. Select a new set on which the Rosetta system must perform the task chain.
4. Click **Next**.

The Rosetta system now performs tasks defined in the task chain on the new set of objects.

Configuring Metadata

This section contains:

Understanding Rosetta Metadata

Each content object (such as an intellectual entity (IE), a representation, or a file) in the Rosetta system is accompanied by information — known as metadata — that describes the semantic and technical characteristics of an object. The Rosetta system uses metadata to conduct a more efficient search of content objects, as well as to provide additional information about content to content consumers.

The Rosetta system supports metadata that originates both within the Rosetta system, and in external systems, as described in the following table:

Table 14. Rosetta Metadata Sources

Metadata Source	Description
Local	■ Descriptive metadata (such as author, title, and subject) is provided by Producer Agents and staff users ■ Technical metadata (such as file name, MIME type, and file size) is generated automatically by the Rosetta system
External	Any metadata stored in an external system, such as a collection management system (CMS) Assessors and Arrangers can import external metadata to the Rosetta system by assigning a CMS ID to a content object. (For more information, see Assigning a CMS ID to an Intellectual Entity in **Part IV, Assessors, Arrangers, and Approvers**, of the *Rosetta Staff User's Guide*.)

Configuring the DC Editor

Staff users add descriptive information using the DC Editor.

Administrators can edit the DC Editor configuration file to define how the DC Editor must process both the elements and their contents. When editing the configuration file, Administrators can define the following parameters:

- DC elements that must be available to staff users
- Element qualifiers, including the type of the information that the qualifier holds and the operators available when searching for the DC field. For example:
  - DATE – Accepts a date value and uses operators such as Before and After.
  - TEXT – (Default) Accepts a text value and uses operators such as Contains Keywords and Starts With.
  - STRING – Accepts a string value and uses operators such as Equals and Does Not Equal.
  - NUMBER – Accepts a number and uses operators Equals, Greater Than, and Less Than.

NOTE:
If you change the element type, a reindexing job must be run for the elements to be searchable under the new type.

- Validation routines that must be run on the document, element, and qualifier levels (such as checking whether a staff user completed all mandatory elements)
- Correction routines that must be run on the document, element, and qualifier levels (such as putting the current date into the mandatory Date element that a staff user left empty)

Administrators can access the DC Editor configuration file starting on the Advanced Configuration page and linking through the following pages: **Repository > Metadata > DC Configuration**.

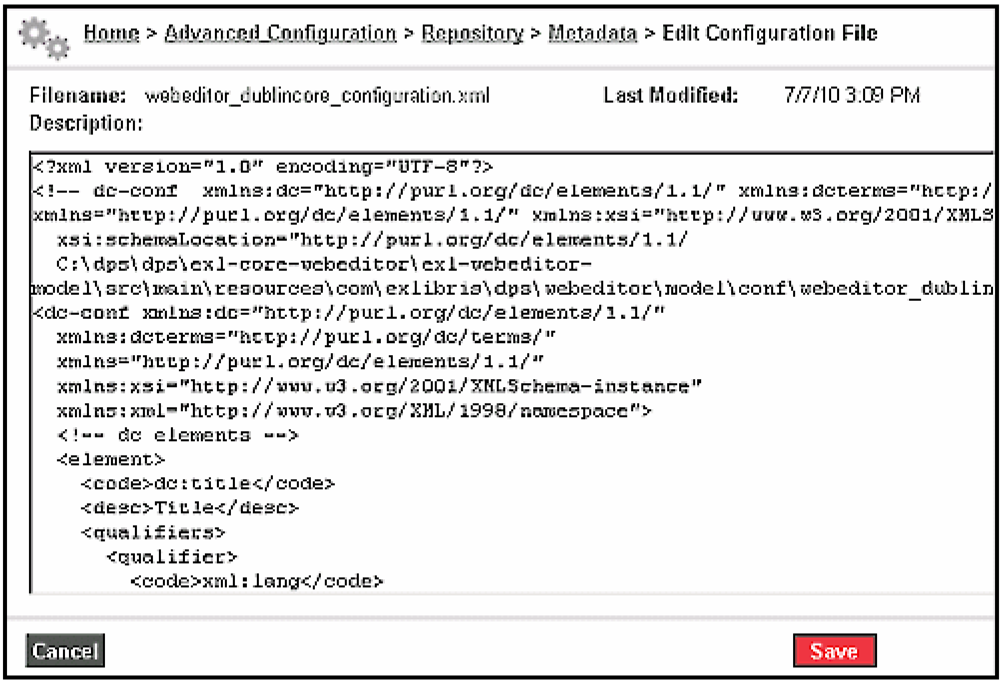


Figure 47: Dublin Core Configuration File

Administrators work with the DC editor configuration file as they do all configuration files. For more information, see **Working with Configuration Files** on page **225**.

Configuring Intellectual Entity (IE) Types

When staff users configure the Rosetta system, they select one of the IE types from the list of predefined options. Administrators define these options during advanced configuration, using the IE Type code table. (For more information about accessing the IE Type code table, see **Administration** on page **17**.)

Figure 48: IE Type Code Table

Administrators work with the IE Type code table as described in **Working with Code Tables** on page 228.

Configuring IE Status

When staff users configure the Rosetta system, they select one of the IE statuses from the list of predefined options. Administrators define these options during advanced configuration, using the IE Status code table. (For more information about accessing the IE Status code table, see **Administration** on page 17.)

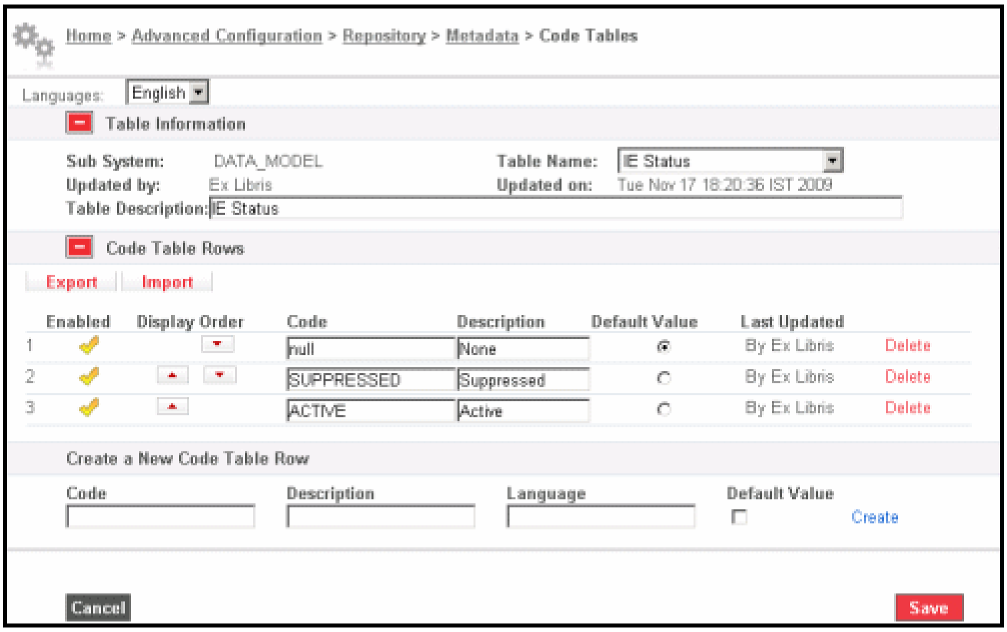


Figure 49: IE Status Code Table

Administrators work with the IE Status code table as described in **Working with Code Tables** on page **228**.

Configuring Subformats

When staff users configure the Rosetta system, they select one of the file subformats from the list of predefined options. Administrators define these options during advanced configuration, using the File Subformat code table.

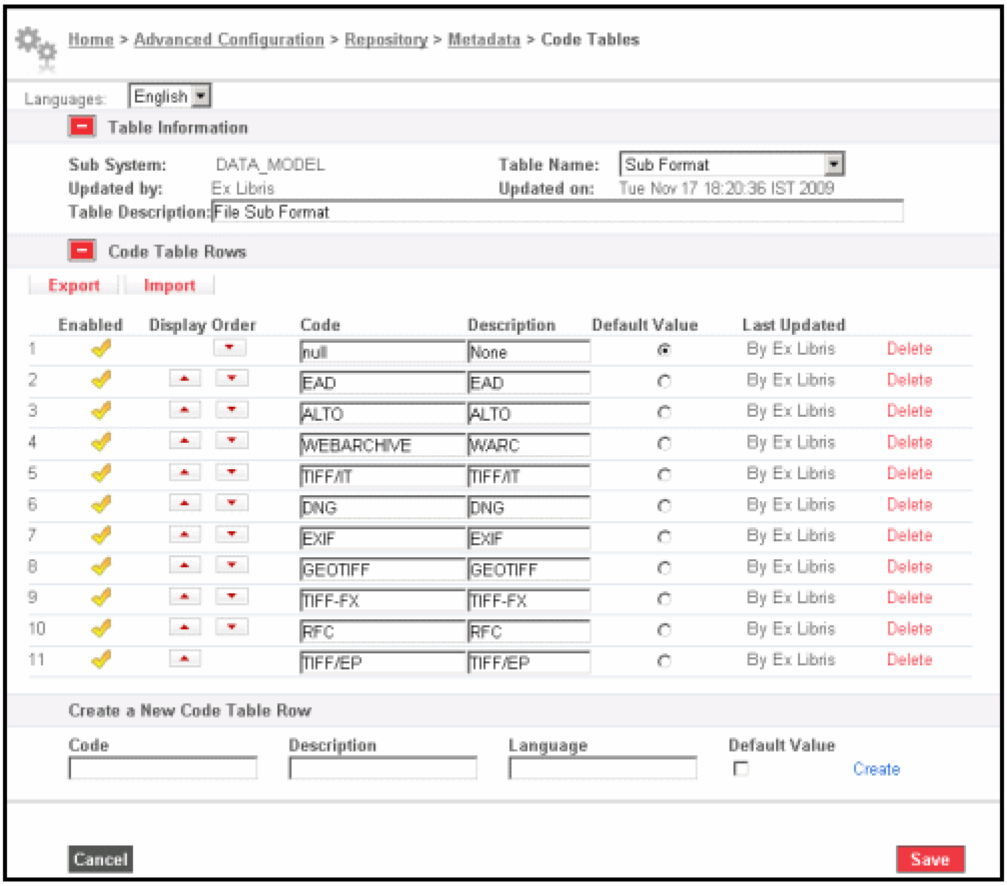


Figure 50: File Subformat Code Table

Administrators work with the File Subformat code table as needed.

Configuring the OAI Server

`oaiproviderconfig.xml` contains configuration details for your OAI server, including values returned through the Identify protocol request and maximum number of objects returned per ListRecords and ListIdentifiers request.

Repository Information

Users can edit the `oaiproviderconfig.xml` configuration file to provide information about the repository as specified in http://www.openarchives.org/OAI/openarchivesprotocol.html#Identify, according to the following guidelines:

Table 15. Repository Information

Field	Default	Notes
repositoryName	Rosetta	Can be replaced

Table 15. Repository Information

Field	Default	Notes
baseURL		Should match your Rosetta delivery load balancer hostname and port
protocolVersion	2.0	Should not be changed
earliestDatestamp	2000-01-01T00:00:00Z	Can be edited to reflect a more recent date; format must conform to `YYYY-MM-DDThh:mm:ssZ` granularity
deletedRecord	persistent	Rosetta currently does not support OAI set deletion, so this should not be changed
granularity	YYYY-MM-DDThh:mm:ssZ	Should not be changed
adminEmail		Can be replaced
ListRecordLimit	1000	Can be replaced; in case of large records timeouts may occur, in which case a lower limit should be applied
ListIdentifiersLimit	2000	Can be replaced; in case of timeouts a lower limit should be applied
scheme	oai	Should not be changed
repositoryIdentifier		Should match your Rosetta delivery load balancer hostname
delimiter	:	Should not be changed
sampleIdentifier		Concatenation of {repositoryIdentifier}:IE1000, e.g. rosetta.myinstitution.org:IE1000

Metatadata Formats

metadataFormat elements should reflect the list of formats as configured in the OAI Metadata format code table. The metadataPrefix element should match the row's code field value.

Utilities and Files

Administrators can create multiple utilities for processing different types of objects and performing different operations.

This section contains:

MIME Types

Administrators define MIME types that must be available to staff when they configure material flows. Administrators can configure MIME types by accessing the MIME Types code table as described in **Working with Code Tables** on page **228**.

Stream Handlers (Deprecated)

Stream handlers are part of the Generic Representation task that creates derivative copies. Their table maps the name of the stream handler (such as `tiff_2_jpeg`) to the script that calls the utility/tool for migrating files. Any parameters are also stored in the table.

Creating a Stream Handler

The Rosetta system comes supplied with a number of predefined stream handlers (such as thumbnail generation and technical metadata extraction). In addition, Administrators can create a new generic representation or thumbnail stream handler.

Administrators configure the components that define task behavior as described in the table below:

Table 16. Task Components

Component	Description	Defined In...
Stream handler utility	A program that performs an operation on an object	Stream Handler mapping table
Script	Code that wraps the stream handler utility and enables launching it with specified parameters	Any external text editor

Table 16. Task Components

Component	Description	Defined In...
Task rule	A rule that defines the stream handler utility to be used for the specific object	One of the following: ■ Generic representation task rules ■ Thumbnail rules

The process of stream handler creation consists of the following stages:

1. Creating a script that runs a stream handler with specified parameters
2. Creating an entry for the new stream handler in the Stream Handlers mapping table
3. Creating a rule that the Rosetta system uses to determine the stream handler to be used for processing a specific object

To create a stream handler:

1. Create a script that wraps the stream handler utility and enables launching it with specified parameters.

   The following example contains the code of the script that wraps the `pdftotext` utility.

```
#!/bin/sh
for ARG do
    T_ARG="\"$ARG\""
    ARGS="$ARGS $ARG"
    T_ARGS="$T_ARGS $T_ARG"
    LAST_ARG="$ARG"
done

eval pdftotext $T_ARGS

exit $?
```

2. On the Advanced Configuration page, click **Repository**.

   The Repository page opens.

3. Click **Stream Handlers**. The Stream Handlers mapping table opens.

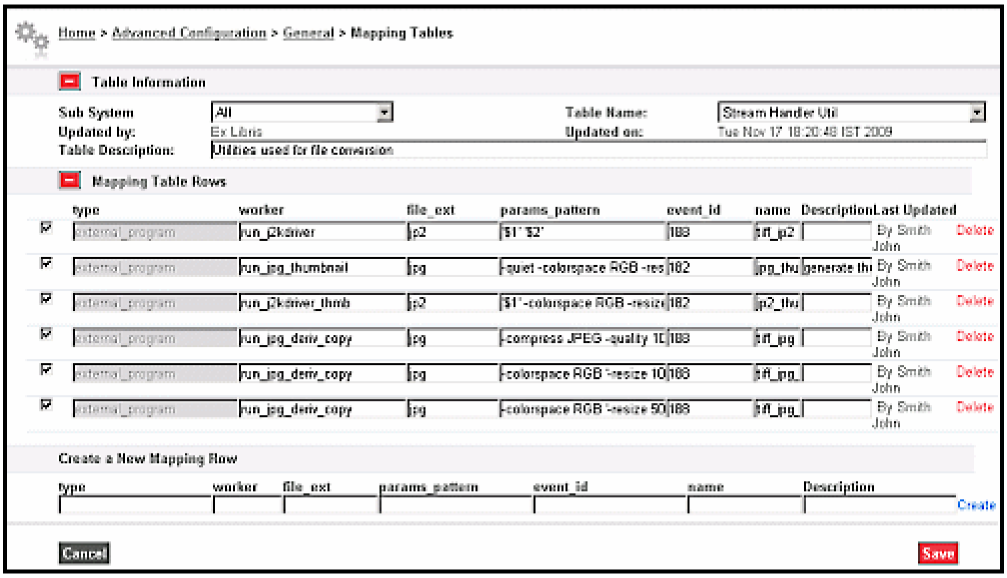


Figure 51: Stream Handlers Mapping Table

4 Enter information under the **Create a New Mapping Row** bar at the bottom of the page.

5 Click **Save**. The new entry is displayed in the mapping table.

6 On the Advanced Configuration page, click **Repository**. The Repository page opens.

7 Click **Utilities and Files**. The Utilities and Files page opens.

8 Click **Generic Representation Task Rules**. The Generic Representation Task rules page opens.

9 Click **Add Rule**. The Task Rule Editor page opens.

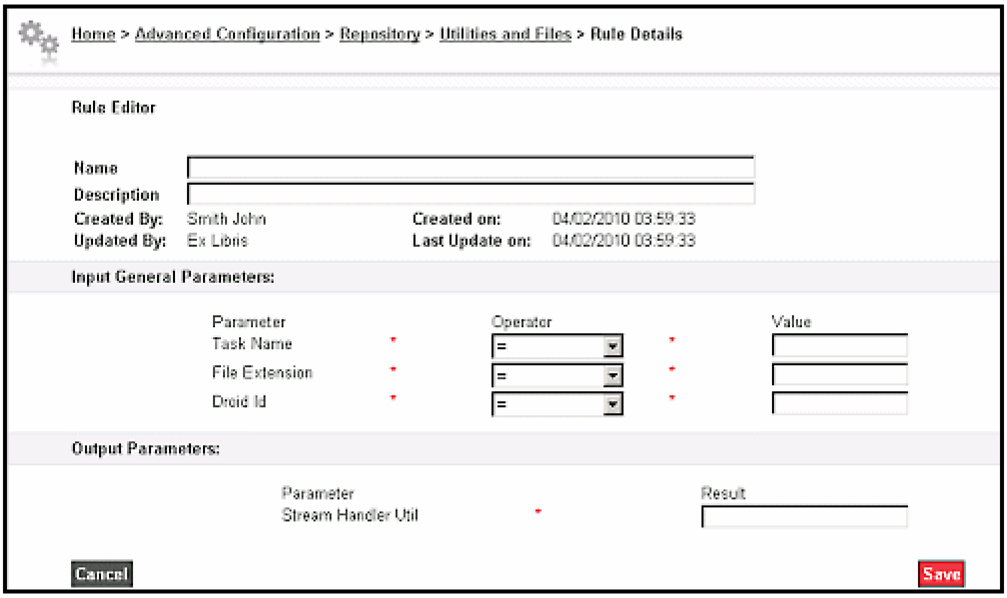


Figure 52: Task Rule Editor Page

10 Complete the fields as required. For detailed information about parameter operators and values, see **Operators Used in Rule Parameters** on page **48**.

11 Click **Save**. The new rule is saved to the Rosetta system.

The task is saved to the Rosetta system. Administrators can now use this task in task chains.

Transformation Profiles

Transformation profiles are migration plugin-based alternatives to the Stream Handler framework. They can be used to generate derivative copies where one-to-many or many-to-one relations exist between the original file format and the derivative copy format (for example, one multi-page TIF file to several JPGs or several TIF files to one PDF).

To create a Transformation Profile:

1 Fromthe Advanced Configuration page, click through the following headings until you reach the Transformation Profiles page: **Repository > Utilities and Files > Transformation Profiles**.

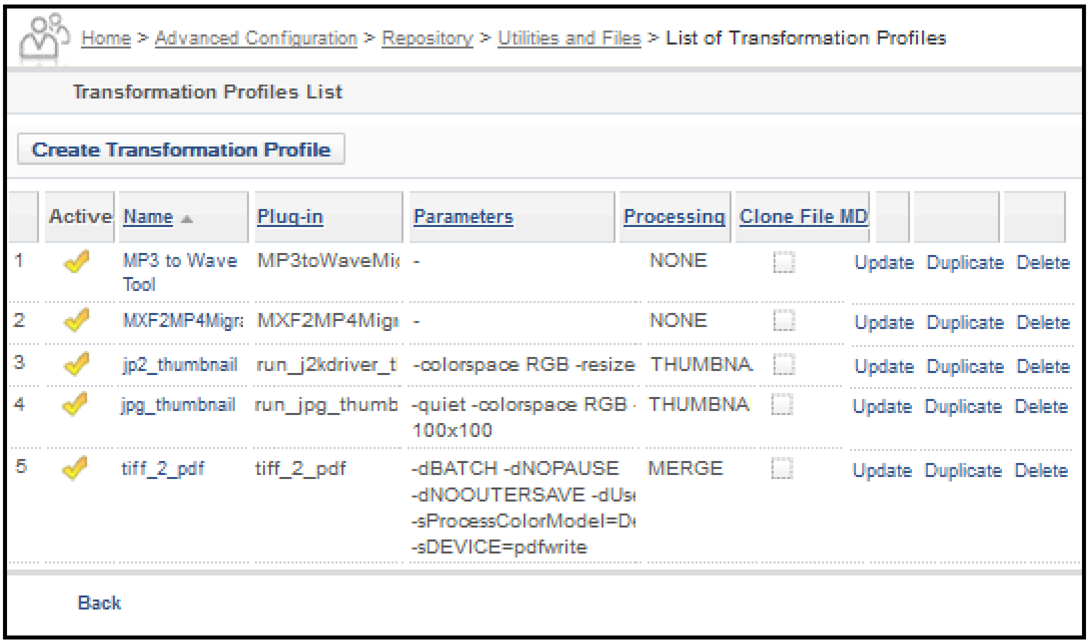


Figure 53: List of Transformation Profiles

2 Click the **Create Transformation Profile** button.

The Transformation Profile Details page opens.

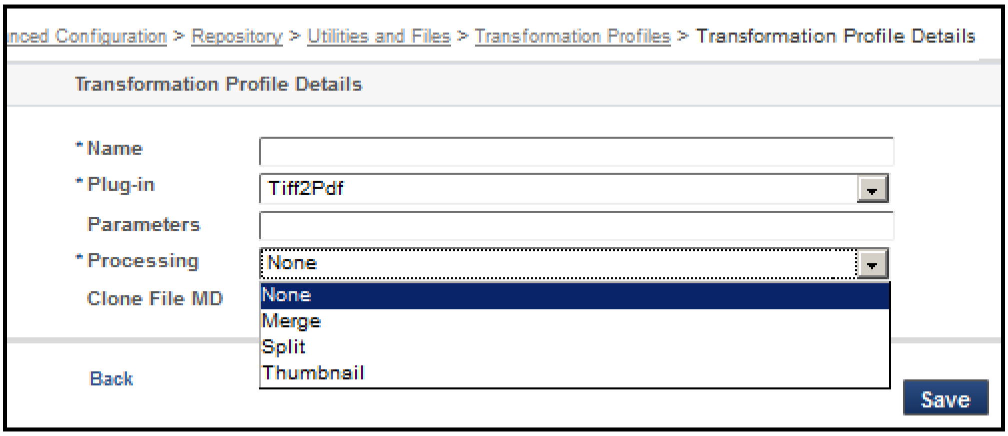
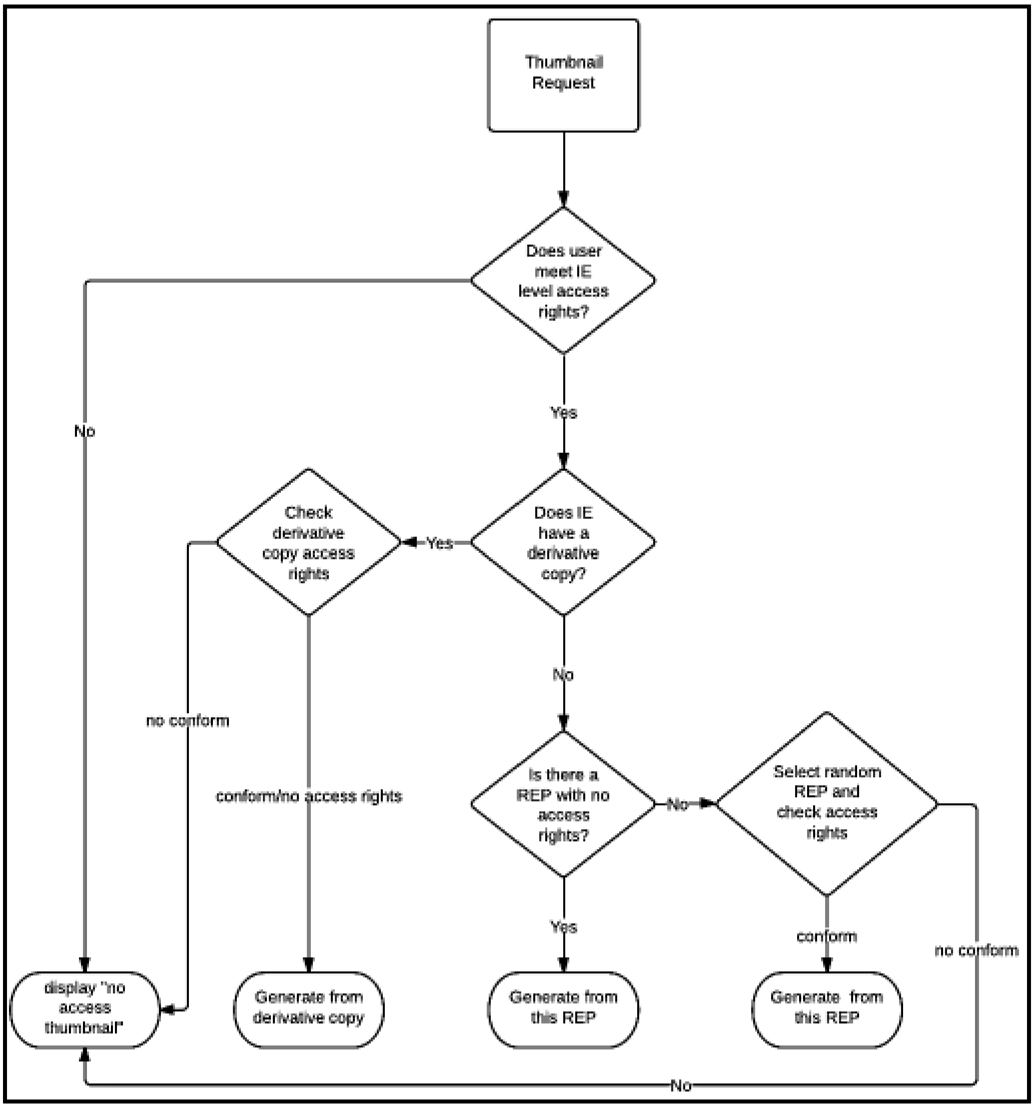


Figure 54: Transformation Profile Details Page

The following table describes the fields available on the Transformation Profile Details page.

Table 17. Fields on the Transformation Profile Details Page

Parameter	Type	Description	Notes
Name	Text	Name of profile	
Plug-in	Combo/drop-down	A list of installed migration plug-ins	
Parameters	Text	Arguments to pass to the plug-in	
Processing	Combo/drop-down	Instructions to Rosetta on how to process the files.	■ None - Each original file will be transferred into one derivative copy file ■ Merge - All files in the selected Representation will be merged into one derivative copy file ■ Split: A multiple-file derivative copy Representation will be created from the single-file original Representation ■ Thumbnail: specifies this profile will be used for generating thumbnails and not derivative copies
Clone File MD	Checkbox	Copy file-level descriptive/source metadata from the original	



NOTES:

- The responsibility for the actual splitting/merging of the files is the plug-ins.
- If no files match the profile configuration, no representation is created.

A transformation profile can be used in a create derivative copy task. See the following figure for an example.

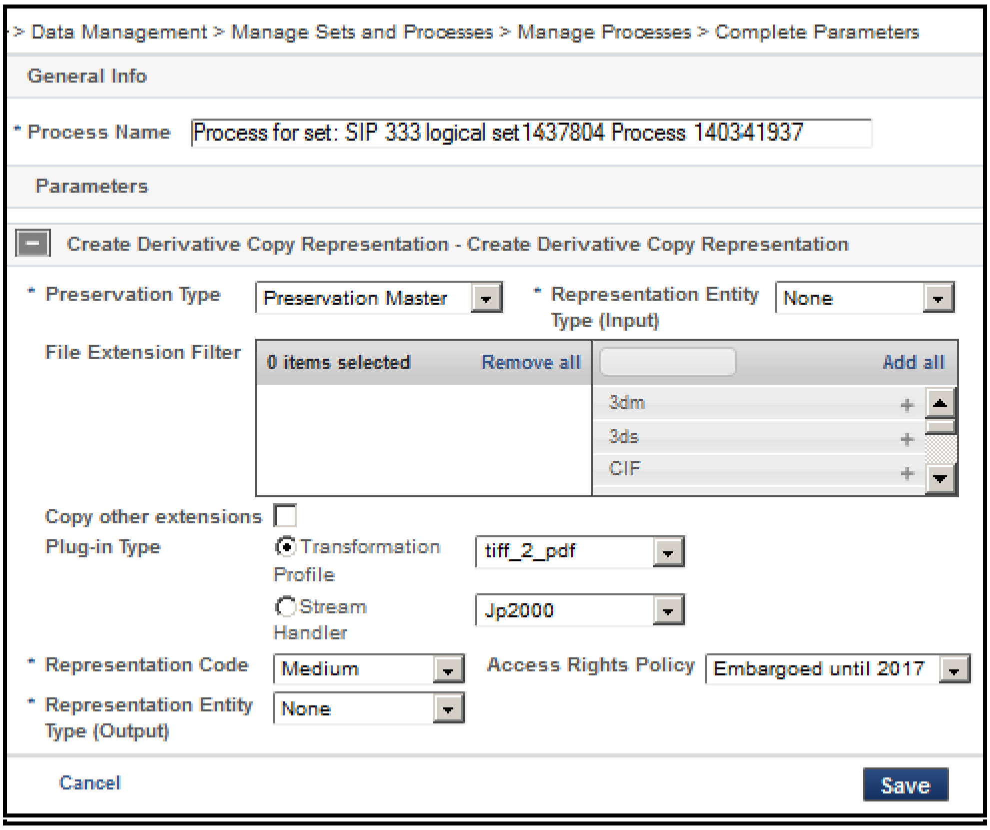


Figure 55: Task Parameters for Transformation Profile

Generic Representation Creation Rules

Generic representation creation rules are used by the system to define which stream handler to use based on the original file format/extension and the task name.

The task name is configured as part of the Create Derivative Copy task chain.

For more information about configuring the task chain, see **Managing Processes** on page **81**.

For information about creating a stream handler as part of a generic representation task, see **Stream Handlers (Deprecated)** on page **94**

Thumbnail Creation Rules

Rosetta automatically creates a thumbnail for each file when it's delivered. In order to create the correct thumbnail for each file format, the system uses these rules to match between the file format and the appropriate utility that should be used to create the thumbnail.

(For information on creating format-utility matching tools, see **Stream Handlers (Deprecated)** on page **94**.)

Rosetta generates thumbnails from a given representation (REP) using the following algorithm:

1. Derivative copy
2. REP with no access rights
3. Any other REP

If access rights are not met for the selected REP, a "no access" thumbnail is displayed.

NOTE:

Administrators can disable access rights checking for thumbnails by setting the check_thumbnail_access_rights general parameter to false. See Rosetta System Administration Guide, General Parameters - Delivery).

If there is no thumbnail creation rule for the selected REP's files, a generic thumbnail is displayed (see **Generic Thumbnail Creation** on page **106**).

The following flowchart demonstrates the process of thumbnail request to thumbnail generation.

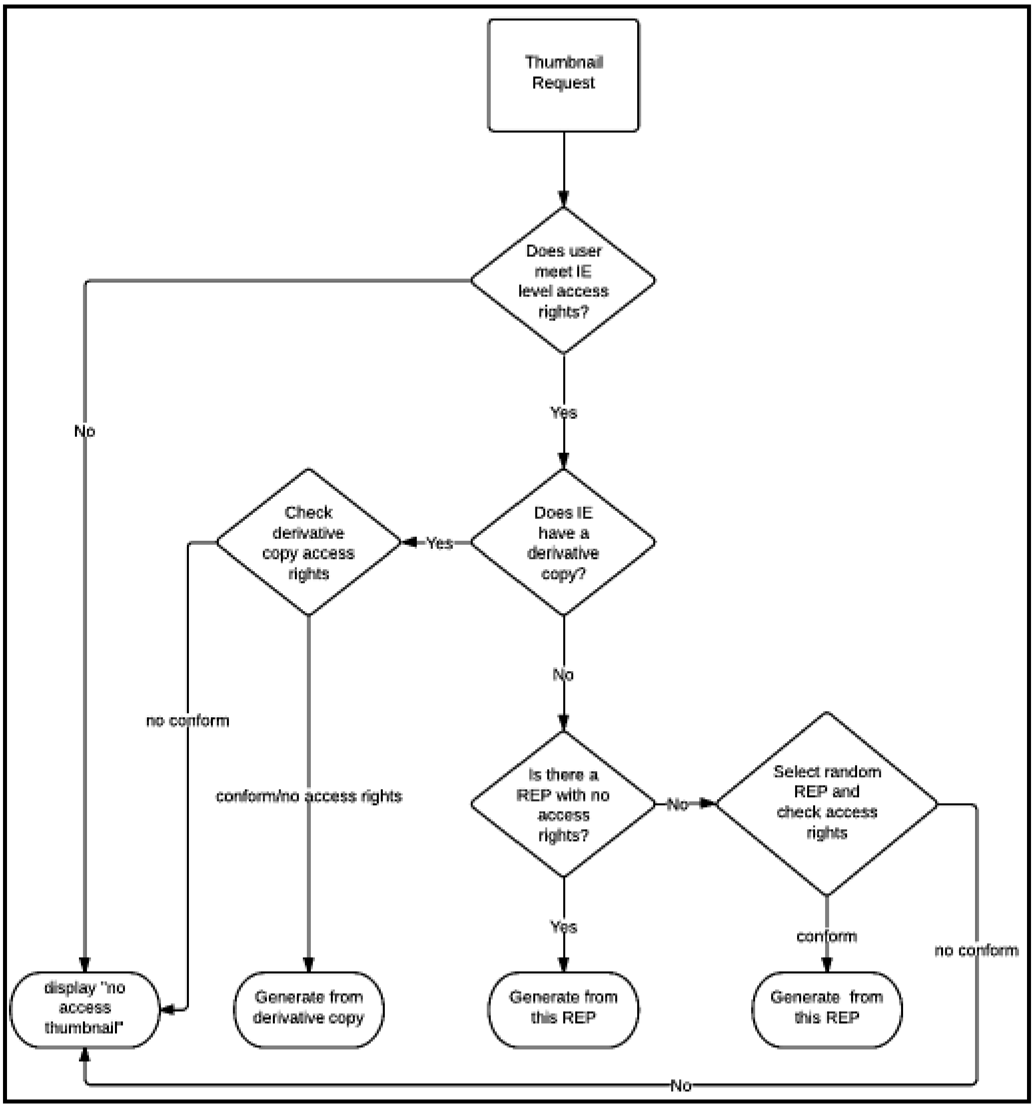


Figure 56: Thumbnail Creation Flow

The order of an IE's thumbnails will be according to the (first) logical structmap. If no logical structmap exists, order will be determined by the physical structmap.

By default, up to five thumbnails can be generated for an IE. This can be increased by the ie_thumbnail_limit general parameter (see Rosetta System Administration Guide, General Parameters - Delivery). The thumbnail view in user interfaces and viewers indicates the actual number of files per IE.

The recommendation remains to create thumbnails as part of the enrichment process or ongoing maintenance task chain to improve user experience for modules that display thumbnails."

General Settings for Repositories

This section contains:

Configuring Events

Administrators can determine which events the Rosetta system must use for audit and statistical purposes. Administrators work with events during advanced configuration, using the Event Configuration mapping table. (For more information about accessing the Event Configuration mapping table, see **Administration** on page **17**.)

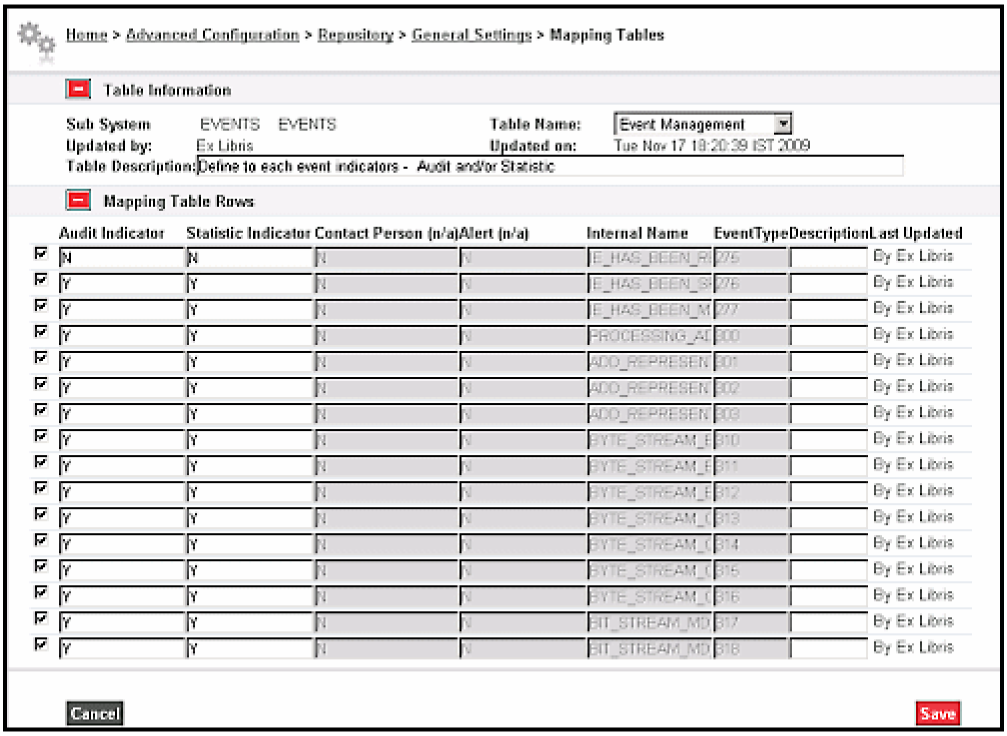


Figure 57: Event Configuration Mapping Table

Administrators work with the Event Configuration mapping table as described in **Working with Mapping Tables** on page **232**.

For a list of Events in Rosetta, see **Appendix C: Events** on page **249**.

Configuring Provenance

Administrators can determine which events the system must store for digital preservation purposes. Administrators define this information during advanced configuration, using the Provenance Configuration mapping table. (For more information on accessing the Provenance Configuration mapping table, see **Administration** on page **17**.)

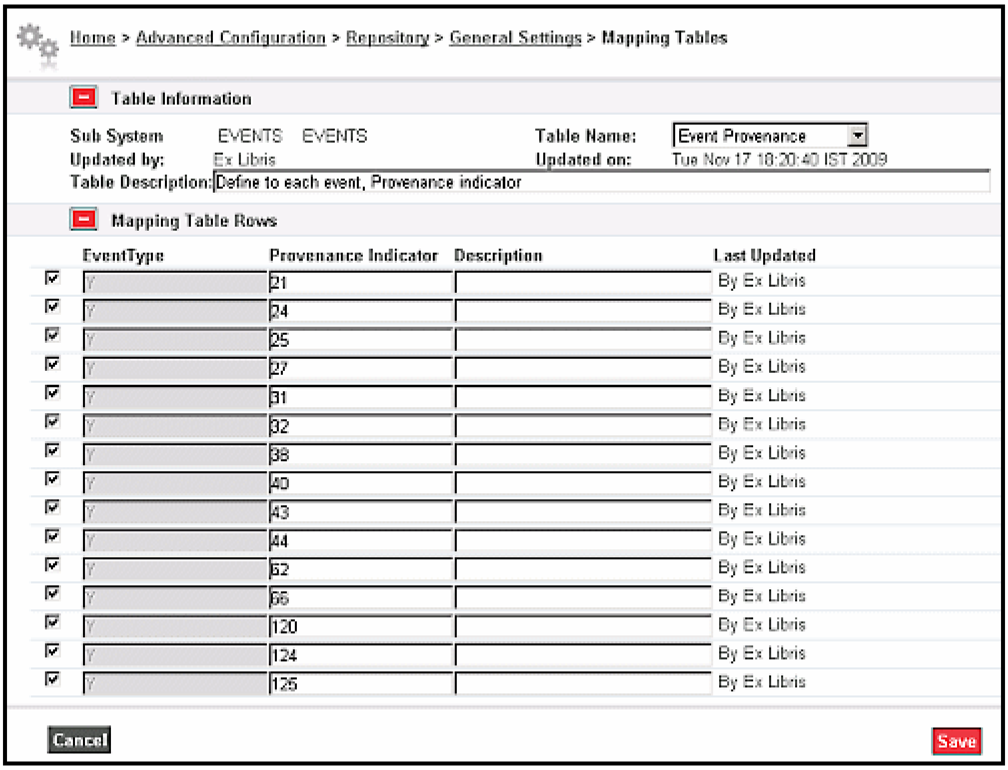


Figure 58: Provenance Configuration Mapping Table

Administrators work with the Provenance Configuration mapping table as described in **Working with Mapping Tables** on page **232**.

Configuring IP Restrictions

Administrators can restrict access to certain areas in the Rosetta system to users who log in to the Rosetta system from specific IP addresses. Administrators configure these IP addresses during advanced configuration using the IP WebService Restriction mapping table. (For more information on accessing the IP WebService Restriction mapping table, see **Administration** on page **17**.)

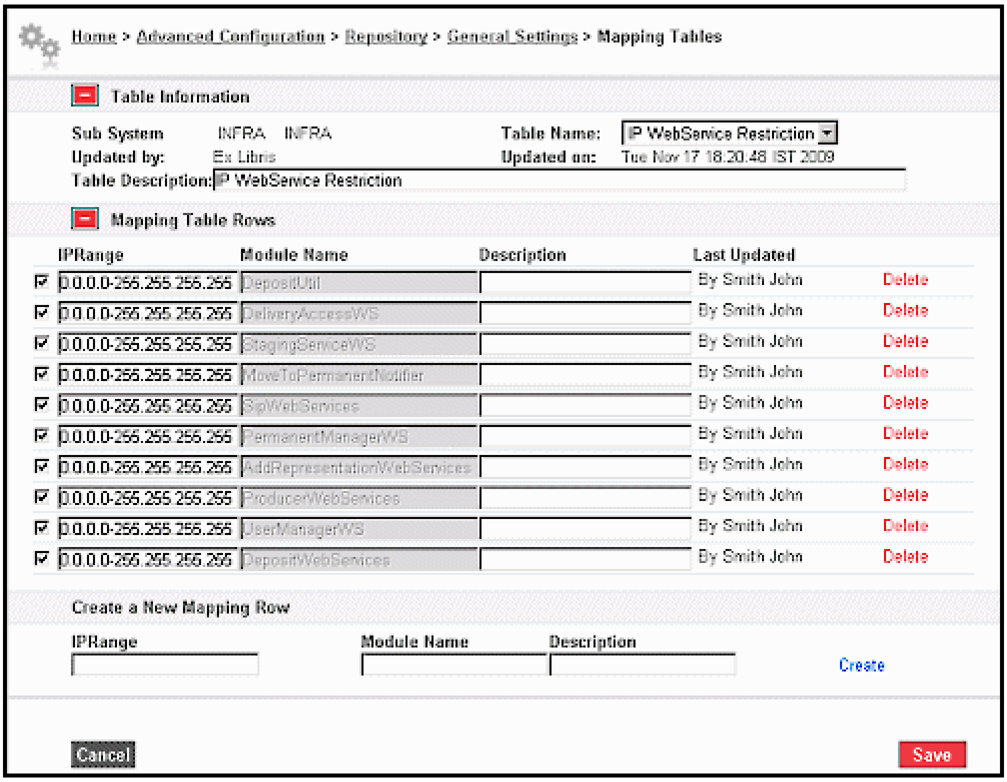


Figure 59: IP WebService Restriction Mapping Table

Administrators can work with the IP WebService Restriction mapping table as described in **Working with Mapping Tables** on page **232**.

Generic Thumbnail Creation

Rosetta uses an algorithm to generate thumbnails. When the system cannot generate the thumbnail using the algorithm, a default image is displayed.

Two types of configuration exist for thumbnail creation and display:

- **Configuring the Default Thumbnail Rule List** on page **106**
- **Selecting the Default Thumbnail Image** on page **109**

Configuring the Default Thumbnail Rule List

To configure the list of rules for thumbnail creation, follow the path from the Advanced Configuration page to **Repository > General Settings > Generic Thumbnail Creation Rules**.

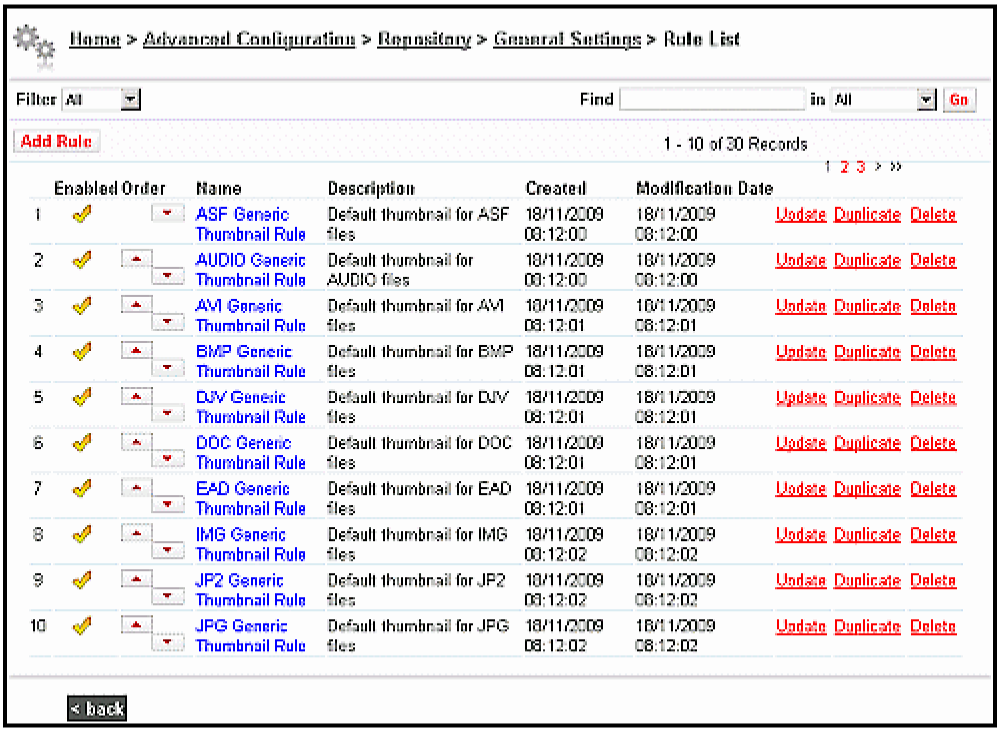


Figure 60: Thumbnail Creation Rules

The rules for all configured thumbnails appear in a table.

Use the up and down arrow buttons to move a rule to a different priority level. The last rule in the list should be a default rule in case no other rules apply.

Editing a Thumbnail Creation Rule

To edit a thumbnail creation rule, click the **Update** link corresponding to the rule you want to edit. The Rule Details page opens:

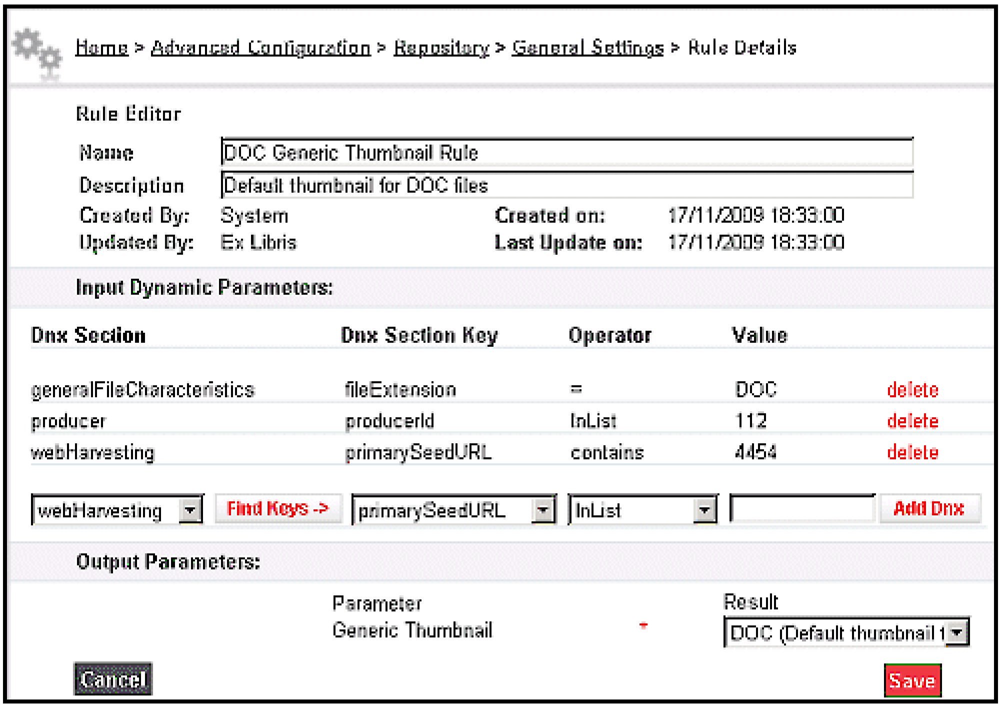


Figure 61: Rule Editor for Generic Thumbnail Rules

You can edit the Name and Description of the rule (top section of the page) You can also edit the output result (using the drop-down at the bottom right of the page, then clicking the **Save** button). You can edit the parameters by adding new ones and/or deleting existing ones.

Rules consist of a metadata parameter, referred to as a DNX, an operator such as equals to, and a value. For details about operators and values, see **Operators Used in Rule Parameters** on page 48.

A rule such as `fileExtension = jpg` tells the system to display the selected default thumbnail image (from the **Result** drop-down field) when the file has the extension `.jpg` and Rosetta is unable to create a specific thumbnail based on the existing thumbnail-creation algorithm.

Adding a Thumbnail Creation Rule

To add a rule:

1. From the **Dnx Section** column, select a DNX section from the drop-down menu and click **Find Keys**.

   The page reloads with relevant key entries in the following field.
2. From the **DNX Section Key** column, select a key from the drop-down menu.

3 Select an operator to compare the key with the value you will enter. For details about operators and values, see **Operators Used in Rule Parameters** on page 48.

4 Enter a value to complete the parameter.

5 Click the **Add DNX** button.

Rosetta adds the rule to the system. When a file matching that parameter cannot obtain a thumbnail image, Rosetta uses this rule to create a default thumbnail.

NOTE:
To change the image displayed when the rules apply, select a different result from the **Result** drop-down list and click **Save**.

Selecting the Default Thumbnail Image

To configure the default image displayed when no thumbnail is available, follow the path from **Advanced Configuration > Repository > General Settings > List of Generic Thumbnails**. The Generic Thumbnail List page opens.

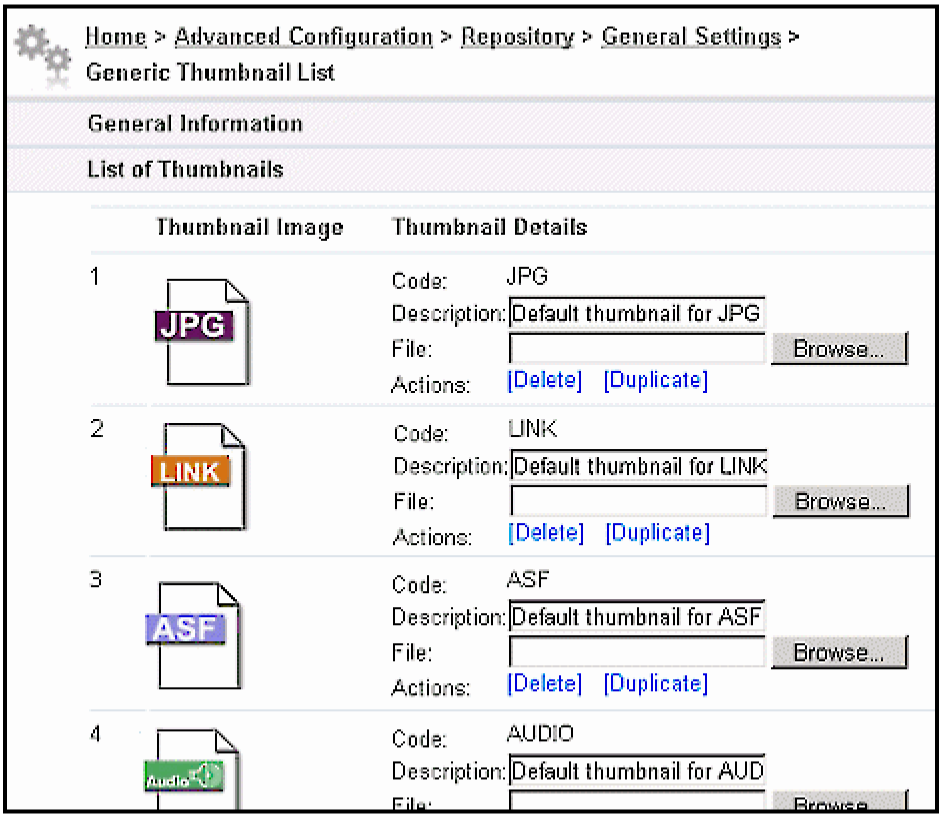


Figure 62: Generic Thumbnail List

To create a new default thumbnail image:

1. Scroll to the bottom of the page.
2. Under the **Load a new Generic Thumbnail** bar, enter a code and a description for the new thumbnail.
3. Click the **Browse** button and select an image from a local or network drive.
4. Click the **Load** button.

   Rosetta loads the thumbnail image and details and displays them as an entry on the Generic Thumbnail List page.

Configuring Sequences

You can configure sequences to create strings consecutive numbers. Sequences can be used to create persistent identifiers.

To create a sequence:

1. Open the sequences page (**Repository > Utilities and Files > Sequences**). The following appears:

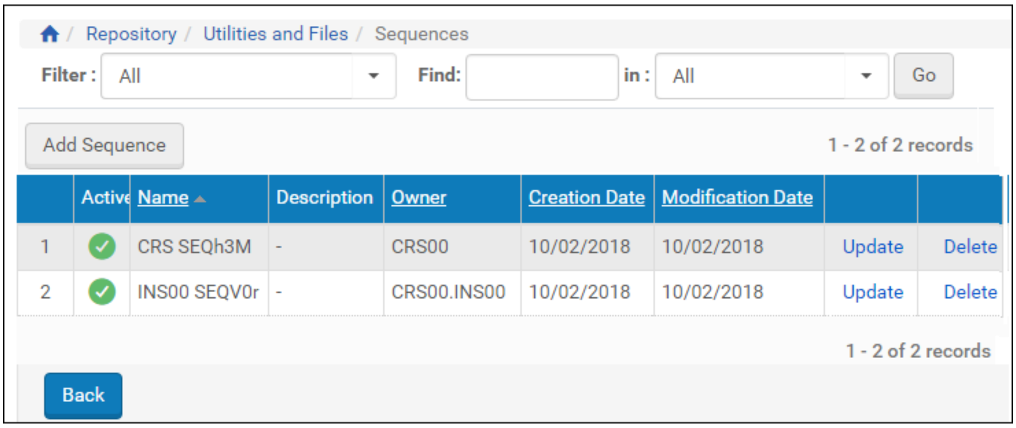


Figure 63: List of Sequences

2. Click Add Sequence. The following appears:

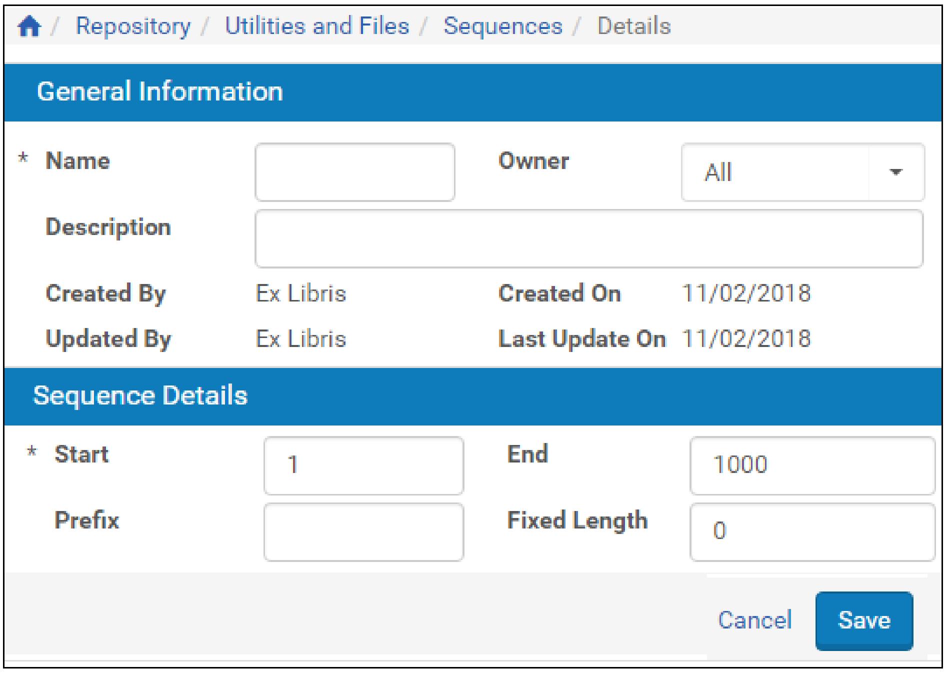


Figure 64: Sequences - Details

3 Fill in the fields of the table as described in the following table:

Table 18. Configuring Sequences

Field	Description
Name	The name of the sequence.
Owner	The institution that you want to have access to the sequence. Select All to have the sequence available to every institution in the consortium.
Description	A description of the sequence.
Start	The number with which you want the sequence to start.
End	The number with which you want the sequence to end.
Prefix	The prefix of the sequence, if desired.
Fixed Length	The number of digits in the sequence. Leading zeros are added to adjust the sequence to the desired length.

4 Click **Save**. The sequence is added to the list of sequences.

Configuring Persistent Identifiers

About Persistent Identifiers

A persistent identifier (PID) is a unique identifier for a digital object such as an image or an article. PIDs enable accessing this object as long as the object exists, even if it was moved to another location. PIDs work with Rosetta and the Handle System to enable persistent identification of an object across contexts.

Persistent Identifiers and the Handle System

The concept of handles is similar to the International Standard Book Number (ISBN). ISBN enables assigning a unique identifier to an edition of a book. This identifier is used internationally to obtain information about the book (such as author, publisher, and country) in a standard manner.

Like ISBN, a PID contains a unique object name, also known as a handle. Because an international unified mechanism for assigning handles to digital objects is provided, external systems can use handles to get information about the object, including its location.

However, handles on their own do not contain any reference to the current object location. Otherwise, handles could not be used when the location is changed. Instead, information about the object’s location is stored separately. A handle is associated with the corresponding location using a set of services provided by the Corporation for National Research Initiatives (CNRI) and known as the Handle System.

The Handle System consists of an open protocol, a namespace, and a reference implementation of this protocol. The protocol enables a distributed computer system to store handles of digital objects and resolve these handles into information required for locating and accessing these objects. When an object is moved, only an appropriate record in the Handle System must be modified. This approach enables keeping the object name persistent while the object’s location and other related information can be modified over time.

A handle is an example of a uniform resource name (URN) that serves as a persistent, location-independent resource identifier. URNs are designed to facilitate mapping other namespaces which share the properties of URNs to the URN namespace.

Configuring Persistent Identifiers – Workflow

This section describes the workflow for adding persistent identifiers to objects in Rosetta. The following are the steps of the workflow:

1. Configure a sequence that will be used to add persistent identifiers to objects in Rosetta.
2. Configure a task chain with the Handle PI Generator task. There are tasks for the IE, representation, and file levels.
3. Create a set of objects to which you want to add the persistent identifiers.
4. Configure and run a process that will run the task chain that adds persistent identifiers to the set of objects.
5. Publish the objects with the persistent identifiers.

Configure a Sequence

For information on configuring sequences, see **Configuring Sequences** on page **110**.

Configure a Task Chain

You must configure a task chain that will be used by a process to add PI's to a set.

To configure a task chain:

1. From the Administration area, click **Repository** > **Task Chains** > **Add Task Chain**. The following appears:

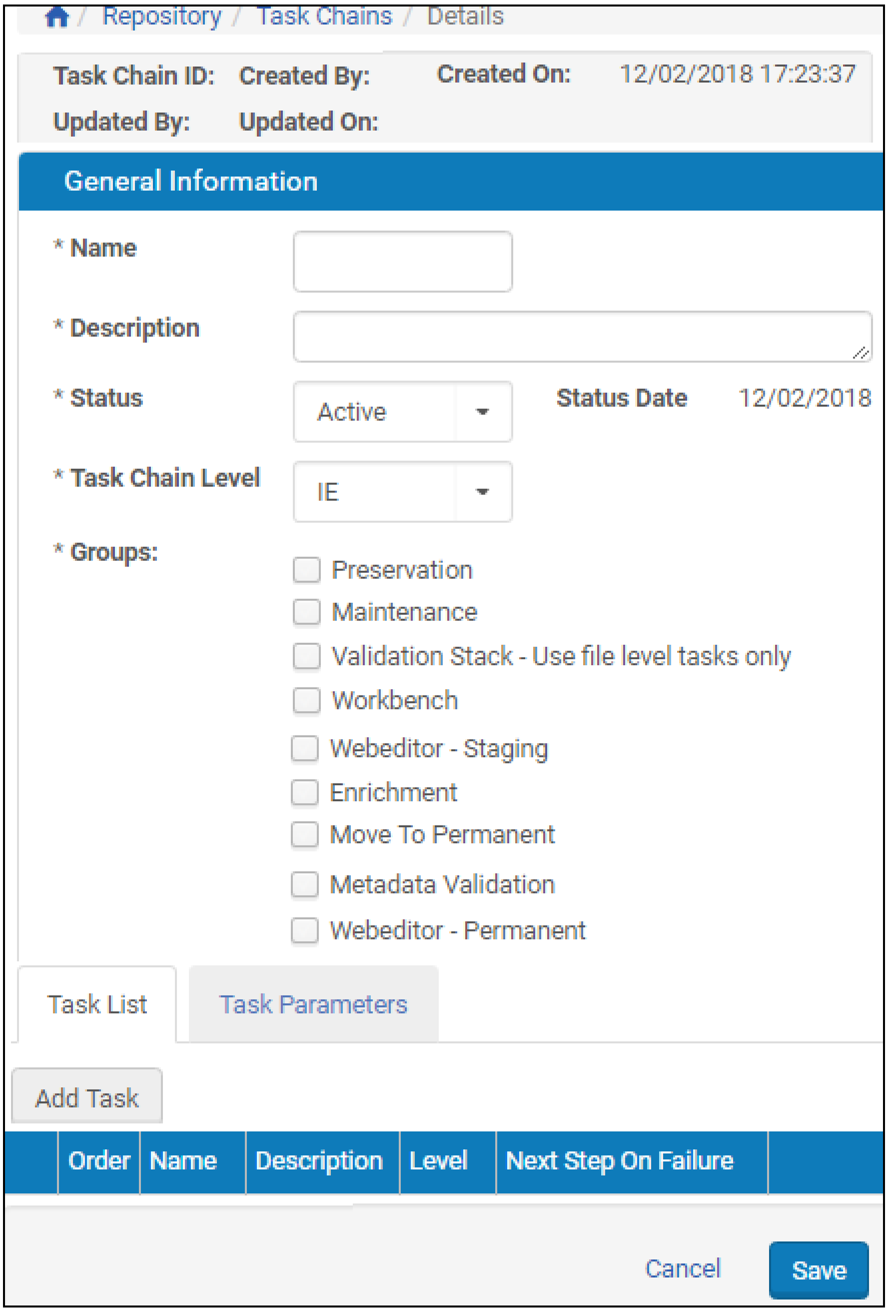


Figure 65: Add Task Chain

2. Enter a name and description for the task chain.

3 Select a status.

4 Select a task chain level – IE, Representation, or File.

5 Select the groups to which you want the task chain to belong.

6 Click **Add Task** and select the Handle PI Generator IE/Rep/File task depending on the level of the task chain.

7 Click the task parameters tab. The following appears:

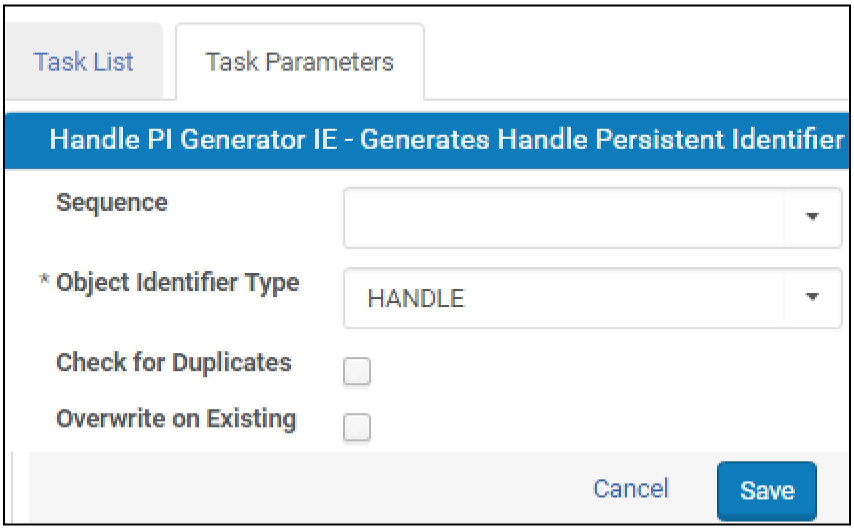


Figure 66: Task Parameters

8 You can enter information in the fields that will appear as the default when creating a process. For more information about these fields, see **Configure and Run a Process** on page **115**.

9 Click **Save**.

The task chain is configured and available to be added to a process.

Create a Set

You must create a set of objects to which you want to add the persistent identifiers. For information on creating a set, see the **Working with Sets** section of the *Rosetta Staff User's Guide*.

Configure and Run a Process

You must configure a process that will run the task chain that adds persistent identifiers to the set of objects that you created.

To configure a process:

1. From the List of Processes page (**Data Management > Manage Sets and Processes > Processes**), click **Add Process**. The list of task chain appears.
2. Select the task chain that you configured to add persistent identifiers to a set and click **Next**. The following appears:

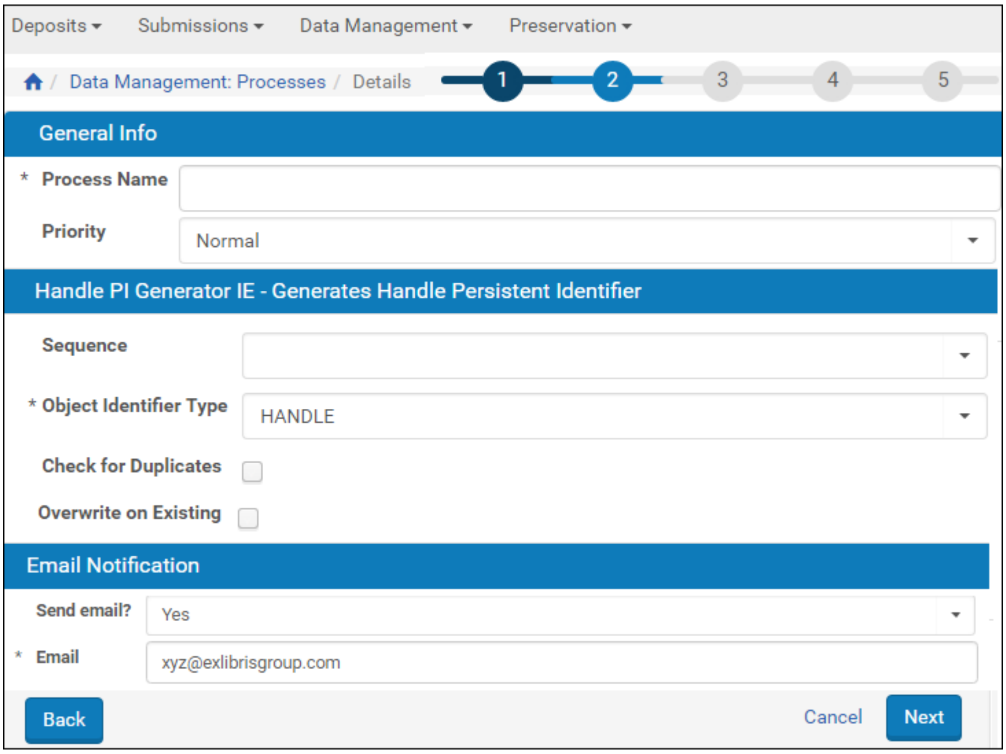


Figure 67: Add Process - Details

3. Enter a name for the process.
4. From the **Priority** drop-down list, select a priority.
5. Select a sequence that you configured.
6. Select an object identifier type.
7. If you want Rosetta to skip identifiers that already exist, select **Check for Duplicates**. Rosetta will skip up to three consecutive duplicates. If you do not select this checkbox, Rosetta adds duplicate identifiers.
8. If you want Rosetta to overwrite existing duplicates, select **Overwrite on Existing**.
9. In the **Send Email?** drop-down list, select **Yes** or **On failure only** if you want to be notified concerning the progress of the process and enter an email address in the **Email** field.

10 Click **Next**.

11 Select a set from the list of sets, and click **Next**.

12 Schedule the process to run if you want, and click **Next**.

13 Review the details of the process, and click **Submit**.

The process runs.

Publish to a Handle Server

After the persistent identifiers have been added to the objects in Rosetta you can publish them, so that they can be used by a Handle server. Configure a publishing configuration for a Handle server by setting the Target Type to the HandlePublisherPlugin. For more information on publishing, refer to the **Configuring Publishing** section of the *Rosetta Staff User's Guide*.

Configuring Persistent Identifiers (Deprecated)

This section contains:

About Persistent Identifiers

A persistent identifier (PID) is a unique identifier for a digital object such as an image or an article. PIDs enable accessing this object as long as the object exists, even if it was moved to another location.

PIDs work with Rosetta and the Handle System to enable persistent identification of an object across contexts. Detailed information on this process is discussed in the following subsections of this section:

Administrators can define rules for creating and publishing PIDs using the Persistent Identifier Creation and Publishing Profiles page. To access this page, follow the path from the Advanced Configuration page: **Repository > Persistent Identifiers > Persistent Identifier Creation and Publishing Profiles**.

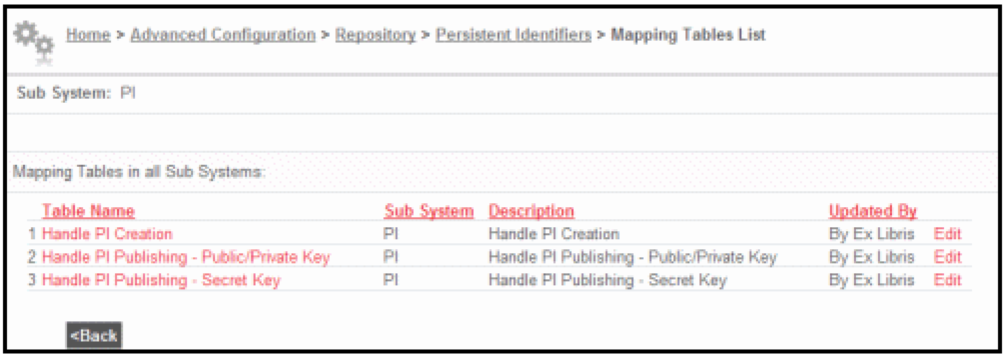


Figure 68: Persistent Identifier Creation and Publishing Profiles Page

Persistent Identifiers and the Handle System

The concept of handles is similar to the International Standard Book Number (ISBN). ISBN enables assigning a unique identifier to an edition of a book. This identifier is used internationally to obtain information about the book (such as author, publisher, and country) in a standard manner.

Like ISBN, a PID contains a unique object name, also known as a handle. Because an international unified mechanism for assigning handles to digital objects is provided, external systems can use handles to get information about the object, including its location.

However, handles on their own do not contain any reference to the current object location. Otherwise, handles could not be used when the location is changed. Instead, information about the object's location is stored separately. A handle is associated with the corresponding location using a set of services provided by the Corporation for National Research Initiatives (CNRI) and known as the Handle System.

The Handle System consists of an open protocol, a namespace, and a reference implementation of this protocol. The protocol enables a distributed computer system to store handles of digital objects and resolve these handles into information required for locating and accessing these objects. When an object is moved, only an appropriate record in the Handle System must be modified. This approach enables keeping the object name persistent while the object's location and other related information can be modified over time.

A handle is an example of a uniform resource name (URN) that serves as a persistent, location-independent resource identifier. URNs are designed to facilitate mapping other namespaces which share the properties of URNs to the URN namespace.

Rosetta and the Handle System

To enable Rosetta system users to work with PIDs, the Rosetta system provides integration with the Handle System. The following diagram shows how PIDs are created and published:

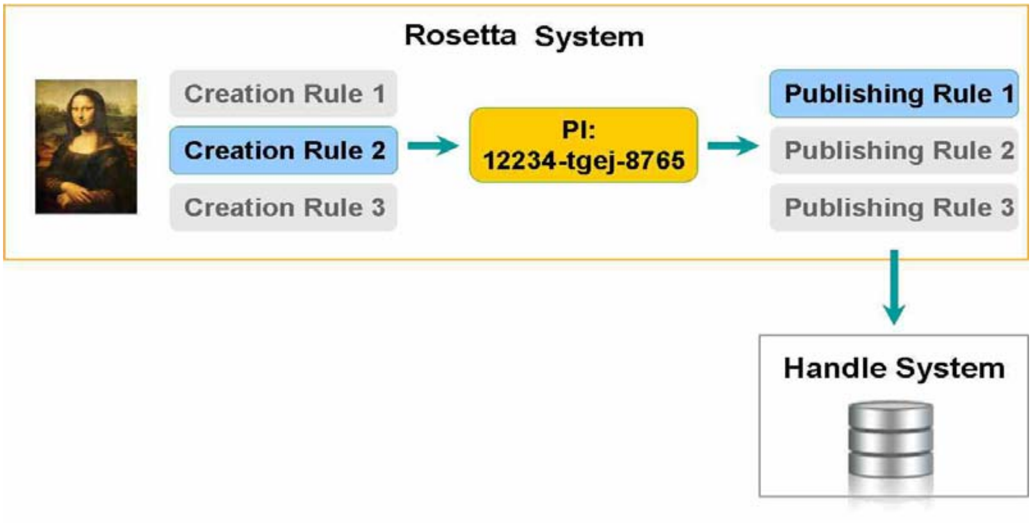


Figure 69: Creating and Publishing PIDs

The flow consists of the following steps:

1 To create a PID, the Rosetta system compares input parameters defined in creation rules with the parameters of a content object.

2 When the Rosetta system finds a creation rule that matches the object parameters, the system creates a PID using a creation profile defined in the rule.

3 To publish the PID to the Handle System, the Rosetta system compares input parameters defined in publishing rules with the parameters of a content object.

4 When the Rosetta system finds a publishing rule that matches the object parameters, the system publishes the PID using a publishing profile defined in the rule.

To enable the Rosetta system to create and publish PIDs to the Handle System, an Administrator configures the following components:

- Creation and publishing profiles (see **Configuring Creation and Publishing Profiles** on page **119**)
- Creation rules (see **Configuring Creation Rules** on page **123**)
- Publishing rules (see **Configuring Publishing Rules** on page **127**)

Configuring Creation and Publishing Profiles

Creation and publishing profiles contain parameters that the Rosetta system must use when creating and publishing PIDs. For example, in a creation profile, Administrators can define a prefix, base URL, and Java class to be used for generating an identifier. Similarly, in a publishing profile, Administrators can define a host name and authentication information that must be used for communicating with a Handle System server.

Administrators can create multiple profiles for different types of content objects. The Rosetta system determines a profile to be used for a specific object using creation and publishing rules. When the Rosetta system does not find an appropriate rule, the system does not generate a PID. (For more information, see **Configuring Creation Rules** on page **123** and **Configuring Publishing Rules** on page **127**.)

Administrators can configure creation and publishing profiles using mapping tables. In addition, Administrators can configure different publishing profiles for authorization performed with a private/public key and a secret key.

To configure a creation or publishing profile:

1. On the Initial Configuration page, click **Repository Setup Definitions**. The Repository Setup Definitions page opens.
2. Click **Step 7: Persistent Identifiers**. The Persistent Identifiers page opens.
3. Click **Persistent Identifier Creation and Publishing Profiles**. The list of mapping tables that define these profiles is displayed.
4. Locate the mapping table that defines the profile with which you want to work and click **Edit**. The page containing entries of the selected mapping table is displayed.

   The fields in the mapping table can vary depending on the profile you are creating. For more information about the fields displayed for each profile type, see the following sections:

   - **Creation Profile** on page **120**
   - **Publishing Profile Using a Public/Private Key** on page **121**
   - **Publishing Profile Using a Secret Key** on page **122**
5. Modify the fields that you want to update, and click **Save**.

The Rosetta system now uses the creation profile as defined in the creation rules. (For more information on working with mapping tables, see **Working with Mapping Tables** on page **232**.)

Creation Profile

When configuring a profile for creating a PID, Administrators define the following fields:

- pi_type
- pi_prefix
- pi_generator_class

- base_url

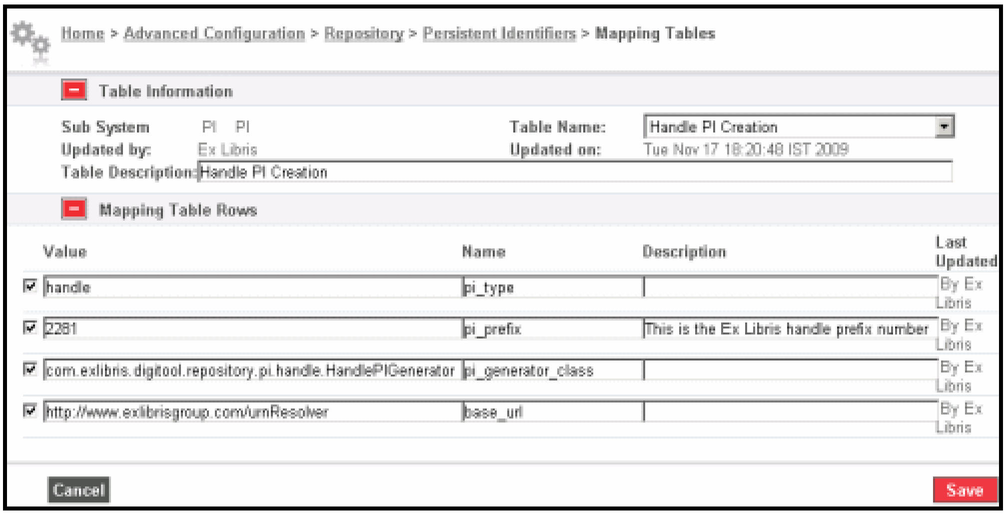


Figure 70: Persistent Identifier Creation Profile

Publishing Profile Using a Public/Private Key

When configuring a profile for publishing a PID using a public/private key, Administrators define the fields as described in the following table:

Table 19. Private/Public Key Parameters

Parameter	Defines...
authentication.type	The authorization type
authentication.public.handleName	The name of a handle on the server that contains authentication information
authentication.public.index	Index that defines where authentication information is stored in the handle
authentication.public.privateKeyFile	Location of the private key
authentication.public.passphrase	Password, if necessary

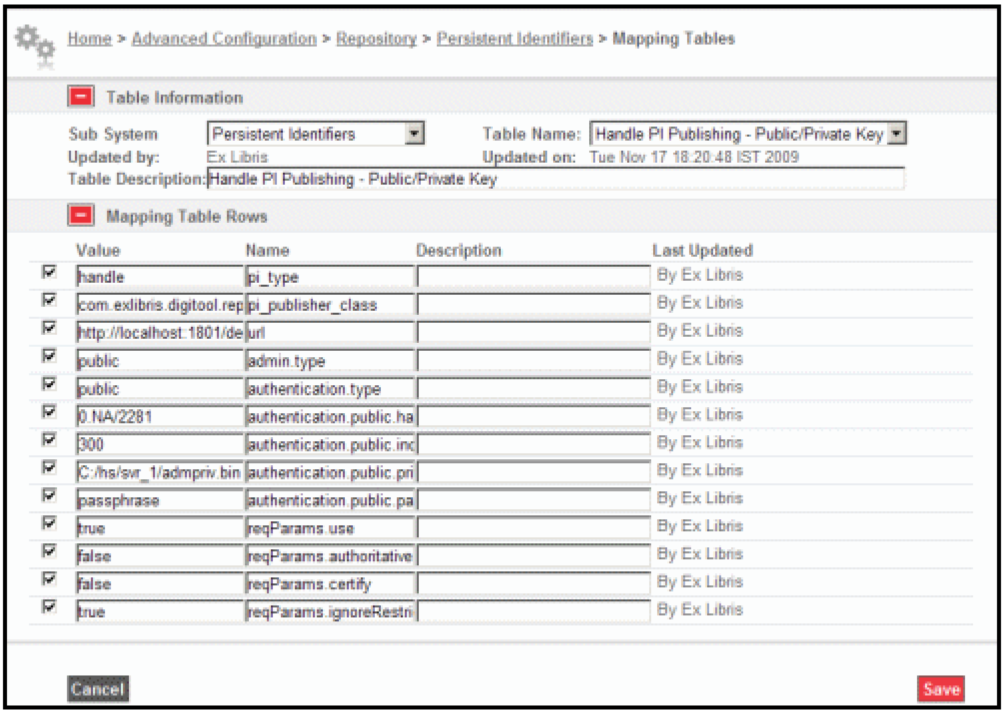


Figure 71: Persistent Identifier Publishing Profile (Public/Private Key)

Publishing Profile Using a Secret Key

When configuring a profile for publishing a PID using a secret key, Administrators define the fields as described in the following table:

Table 20. Secret Key Parameters

Parameter	Defines...
authentication.type	The authorization type
authentication.secret.handleName	The name of a handle on the server that contains authentication information. Usually, the name of a handle is the handle prefix followed by `/ADMIN`.
authentication.secret.index	Index that defines where authentication information is stored in the handle
authentication.secret.pass	Secret key's password

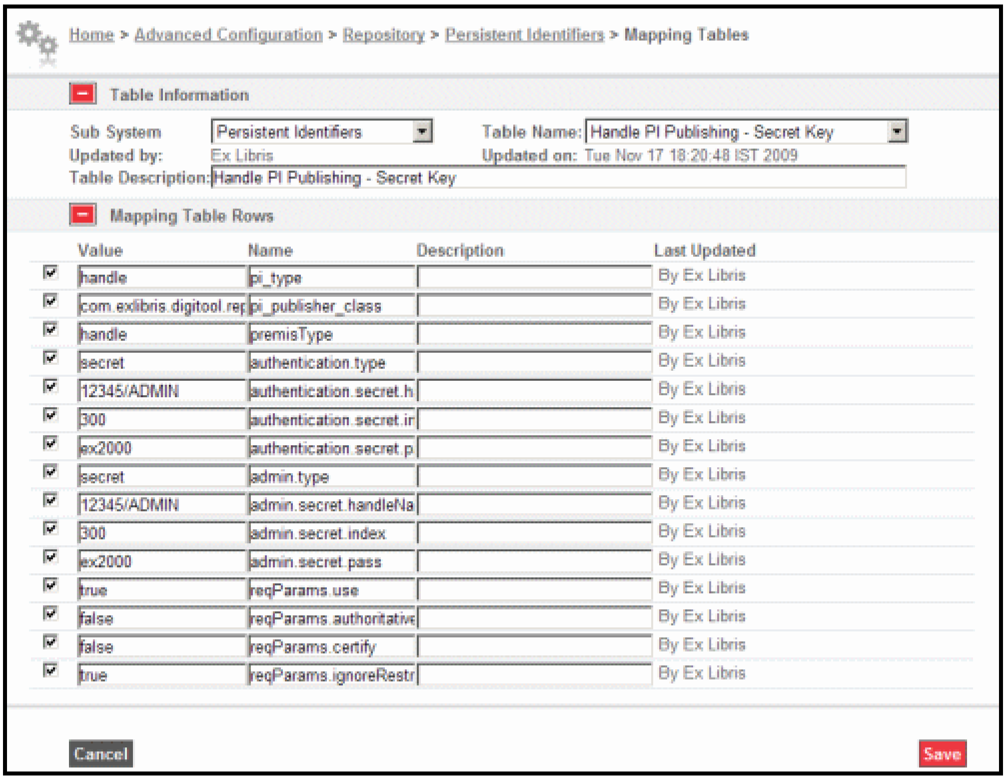


Figure 72: Persistent Identifier Publishing Profile (Secret Key)

Configuring Creation Rules

To define the profile that the Rosetta system must use to create a PID, Administrators configure creation rules. If multiple rules are defined, the Rosetta system applies the first rule found.

Administrators work with creation rules using the List of Creation Rules page.

To access the List of Creation Rules page:

1. From the Advanced Configuration page, follow the path: **Repository > Persistent Identifiers**.

   The Persistent Identifiers page opens.

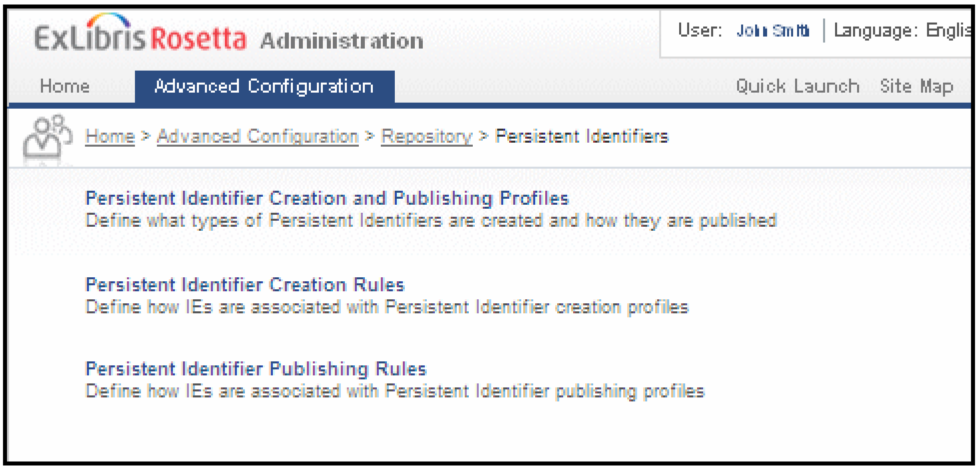


Figure 73: Persistent Identifiers Page

2 Click **Persistent Identifier Creation Rules**.

The Rule List page opens.

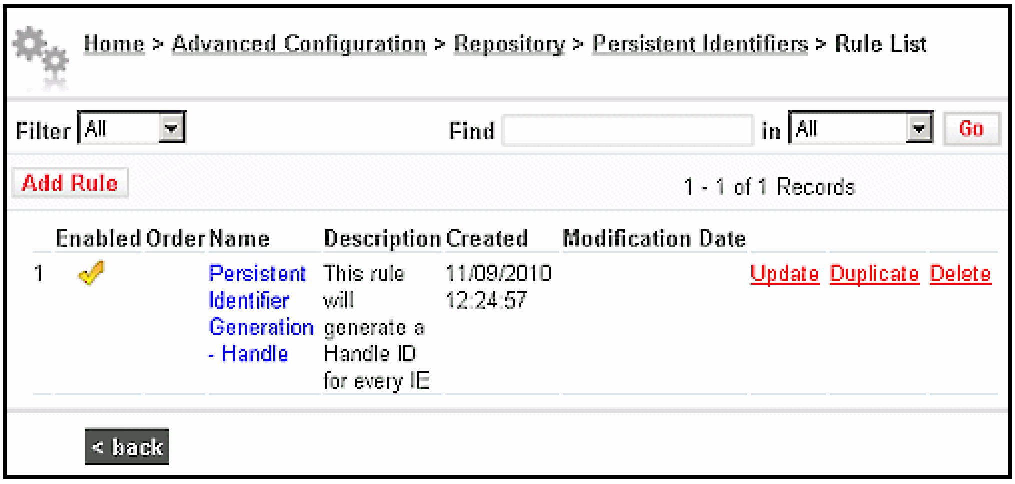


Figure 74: List of Creation Rules Page

The following actions can be performed from the Rule List page:

- **Adding a Creation Rule** on page **125**
- **Duplicating a Rule** on page **126**
- **Updating a Creation Rule** on page **126**
- **Deleting a Creation Rule** on page **126**
- **Activating and Deactivating a Creation Rule** on page **127**
- **Re-ordering the List of Creation Rules** on page **127**

Adding a Creation Rule

Administrators can add new creation rules to define how a PID must be created. When adding a creation rule, Administrators define general information for the rule (such as the name and description of the rule), input parameters (such as object type or Producer ID), and output parameters (such as the handle profile).

To add a creation rule:

1. On the List of Creation Rules page (see **Configuring Creation Rules** on page 123), click **Add Rule**. The Rule Details page opens.

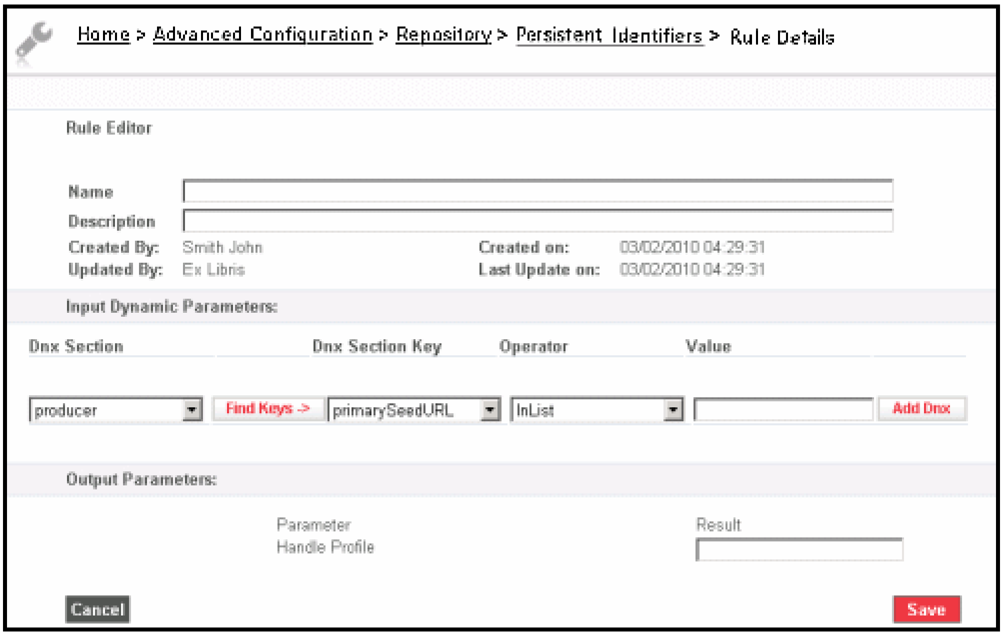


Figure 75: Rule Details Page

2. In the **Name** and **Description** fields, enter the information for the rule.
3. In the **Input Dynamic Parameters** pane, define parameters and their values. For details about operators and parameters, see **Operators Used in Rule Parameters** on page 48.
4. In the **Output Parameters** pane, in the **Handle Profile** field, enter the name of a handle profile to be used for creating the rule. (For more information on configuring profiles, see **Configuring Creation and Publishing Profiles** on page 119.)
5. Click **Save**. The rule is displayed on the List of Creation Rules page.

The Rosetta system now uses the rule when creating PIDs.

Duplicating a Rule

Administrators can duplicate rules. This is especially helpful when creating a new rule. It is often faster to duplicate an existing rule and modify it, than to create a new rule.

To duplicate a rule:

On the Persistent Identifier Creation and Publishing Rules page, locate the rule you want to duplicate and click **Duplicate**. The Rosetta system creates a copy of the rule.

An exact rule of the Producer profile is added to the Persistent Identifier Creation and Publishing Rules page. The Rosetta system automatically labels the new rule with the name `Copy of` followed by the name of the original rule. Edit the rule as needed and save.

Updating a Creation Rule

Administrators can update general information, input and output parameters of an existing creation rule.

To update a creation rule:

1. On the List of Creation Rules page (see **Configuring Creation Rules** on page **123**), locate the creation rule you want to update and click **Update**. The Rule Details page opens.
2. Modify the fields you want to update, and click **Save**.

The creation rule is updated in the Rosetta system.

Deleting a Creation Rule

Administrators can delete an existing creation rule.

NOTE:
After deleting a creation rule, it is no longer available to the Rosetta system for matching.

To delete a creation rule:

1. On the List of Creation Rules page (see **Configuring Creation Rules** on page **123**), locate the creation rule you want to delete and click **Delete**. The confirmation page opens.
2. Click **OK**.

The creation rule is deleted from the Rosetta system.

Activating and Deactivating a Creation Rule

Administrators can activate or deactivate a creation rule. After deactivating a creation rule, it is no longer available to the Rosetta system for matching.

On the List of Creation Rules page, the creation rule's status is indicated by the check mark in the **Active** column:

- Yellow - The creation rule is active.
- Grey - The creation rule is inactive.

To activate or deactivate a creation rule:

1. On the List of Creation Rules page (see **Configuring Creation Rules** on page **123**), locate the creation rule you want to activate or deactivate.
2. In the **Active** column, click the check mark. The check mark in the **Active** column indicates the new status.

The creation rule is changed from active to inactive, or from inactive to active.

Re-ordering the List of Creation Rules

To define the handle profile that must be used for a specific content object, the Rosetta system compares the input parameters defined in a creation rule with the parameters of the content object.

The creation rules are analyzed in the same order as they are displayed on the List of Creation Rules page. The Rosetta system uses the first creation rule found that matches the parameters of the content object.

An Administrator can re-order creation rules to change their priority.

To re-order the list of creation rules:

- On the List of Creation Rules page (see **Configuring Publishing Rules** on page **127**), select the rule, and then use the up and down arrows to change the rule's priority.

The Rosetta system now analyzes the creation rules in the newly defined order.

Configuring Publishing Rules

To define the profile that the Rosetta system must use to publish a PID, Administrators configure publishing rules. If multiple rules are defined, the Rosetta system applies all the rules that satisfy an object's parameters.

Administrators work with publishing rules using the List of Publishing Rules page.

To access the List of Publishing Rules page:

1 From the Advanced Configuration page, follow the path: **Repository > Persistent Identifiers**.

The Persistent Identifiers page opens.

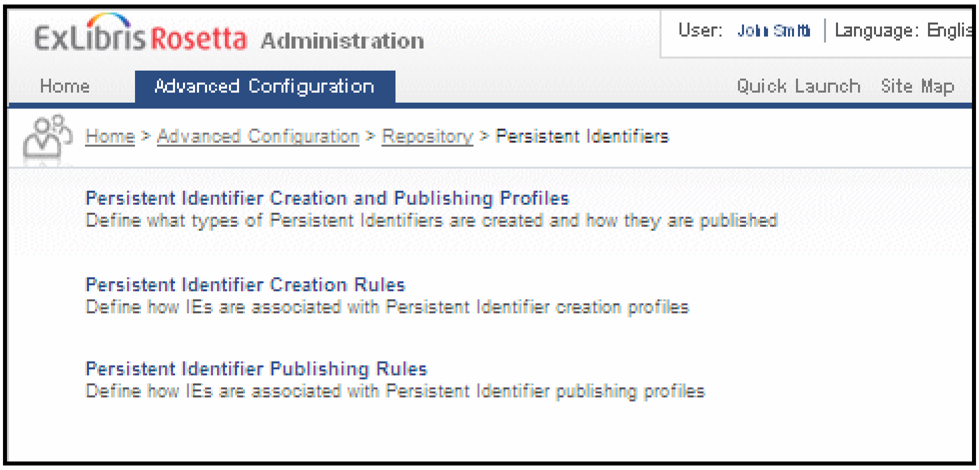


Figure 76: Persistent Identifiers Page

2 Click **Persistent Identifier Publishing Rules**.

The Rule List page opens.

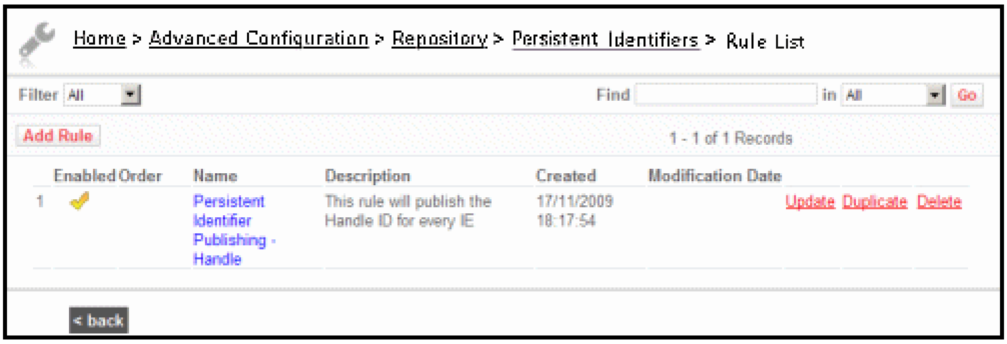


Figure 77: Rule List Page for Publishing Rules

The following actions can be performed on the List of Creation Rules page:

- **Adding a Publishing Rule** on page **129**
- **Updating a Publishing Rule** on page **130**
- **Deleting a Publishing Rule** on page **130**
- **Activating and Deactivating a Publishing Rule** on page **130**
- **Re-Ordering the List of Publishing Rules** on page **131**

Adding a Publishing Rule

Administrators can add new publishing rules to define how a PID must be published. When adding a publishing rule, Administrators define general information for the rule (such as the name and description of the rule), input parameters (such as object type or Producer ID), and output parameters (such as the handle profile).

To add a publishing rule:

1 On the List of Publishing Rules page (see **Configuring Publishing Rules** on page 127), click **Add Rule**. The Rule Details page opens.

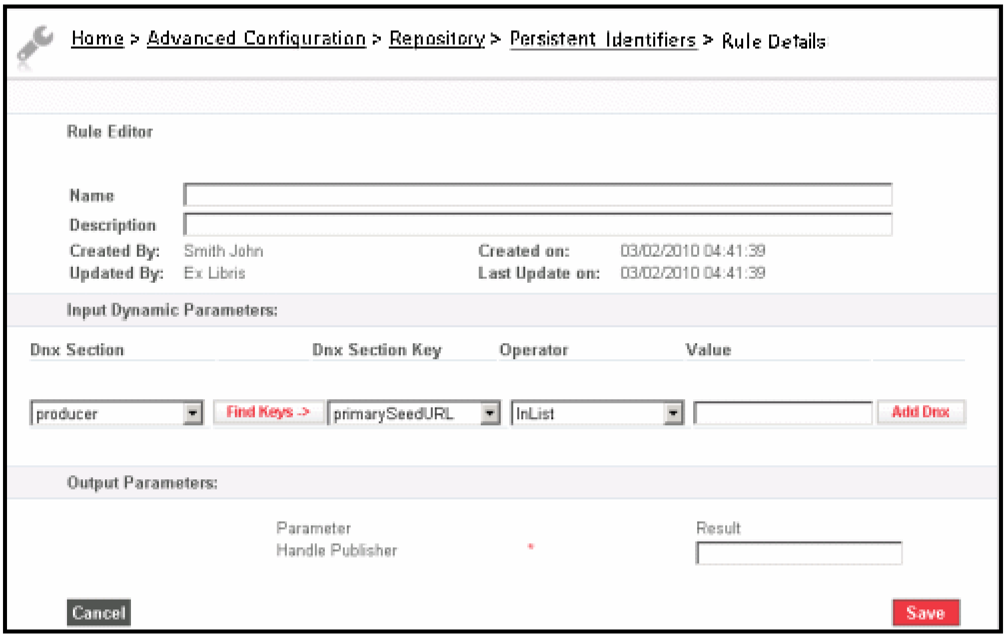


Figure 78: Rule Details Page

2 In the **Name** and **Description** fields, enter the information for the rule.

3 In the **Input Dynamic Parameters** pane, define parameters and their values. For more information about paramaters and operators, see **Operators Used in Rule Parameters** on page 48.

4 In the **Output Parameters** pane, in the **Handle Publisher** field, enter the name of a handle profile to be used for publishing the rule. (For more information about configuring profiles, see **Configuring Creation and Publishing Profiles** on page 119.)

5 Click **Save**.

The Rule List page opens with the new rule in the list.

The Rosetta system now uses the rule when publishing PIDs.

Updating a Publishing Rule

Administrators can update general information, input and output parameters of an existing publishing rule.

To update a publishing rule:

1. On the List of Publishing Rules page (see **Configuring Publishing Rules** on page 127), locate the creation rule you want to update and click **Update**.

   The Rule Details page opens.

2. Modify the fields you want to update, and then click **Save**.

   The publishing rule is updated in the Rosetta system.

Deleting a Publishing Rule

Administrators can delete an existing publishing rule.

NOTE:
After deleting a publishing rule, it is no longer available to the Rosetta system for matching.

To delete a publishing rule:

1. On the List of Publishing Rules page (see **Configuring Publishing Rules** on page 127), locate the publishing rule you want to delete and click **Delete**.

   A confirmation page opens.

2. Click **OK**.

   The publishing rule is deleted from the Rosetta system.

Activating and Deactivating a Publishing Rule

Administrators can activate or deactivate a publishing rule. After deactivating a publishing rule, it is no longer available to the Rosetta system for matching.

On the List of Publishing Rules page, the publishing rule's status is indicated by the check mark in the **Active** column:

- Yellow - The publishing rule is active.
- Grey - The publishing rule is inactive.

To activate or deactivate a publishing rule:

1. On the List of Publishing Rules page (see **Configuring Publishing Rules** on page 127), locate the publishing rule you want to activate or deactivate.
2. In the **Active** column, click the check mark. The check mark in the **Active** column indicates the new status.

   The publishing rule is changed from active to inactive, or from inactive to active.

Re-Ordering the List of Publishing Rules

To define the handle profile that must be used for a specific content object, the Rosetta system compares the input parameters defined in a publishing rule with the parameters of the content object.

The publishing rules are analyzed in the same order as they are displayed on the List of Publishing Rules page. The Rosetta system uses the first publishing rule found that matches the parameters of the content object.

An Administrator can re-order publishing rules to change their priority.

To re-order the list of publishing rules:

- On the List of Publishing Rules page (see **Configuring Publishing Rules** on page 127), select the rule, and then use the up and down arrows to change the rule's priority.

The Rosetta system now analyzes the publishing rules in the newly defined order.

8

Bytestream Extraction Rules

This section contains:

About Bytestream Extraction Rules

In order to provide bytestream support, Rosetta has set up a plug-in extraction tool for a bytestream-related task chain. The task chain is used during SIP processing for new deposits, as part of a maintenance job, or as part of an Add Representation task.

Bytestreams in Task Chains

The task chain includes a virus check, format identification, technical metadata extraction, and risk extraction. Should the extraction process fail at any stage, the entire SIP is routed to a Technical Analyst for handling.

When a file contains bytestreams (for example, a multi-TIFF file), Rosetta extracts the bytestreams and runs them through the validation stack. The metadata is kept separately for each bytestream while the file itself is kept in the permanent directory as is, not extracted.

New Bytestream Extraction Rule

A new rule available from the SIP Routing Rules page defines the following:

- Input: Dynamic input – All IE, REP, and File DNX attributes will be available.
- Output: Bytestream Extraction Tool – Extracts bytestreams out of a bytestream file. The list of bytestream extraction tools will be driven from the plug-in manager and will include all DecomposerPlugin extractors

Rule List

Which extraction rule to use when processing a file containing bytestreams is determined by bytestream type and rule precedence as configured by the Administrator.

To access the list of bytestream extraction rules:

Follow this path from the Advanced Configuration page:

- **SIP Processing > Processing Definitions > Bytestream Extraction Rules**.

  The Rule List page for bytestream extractions opens.

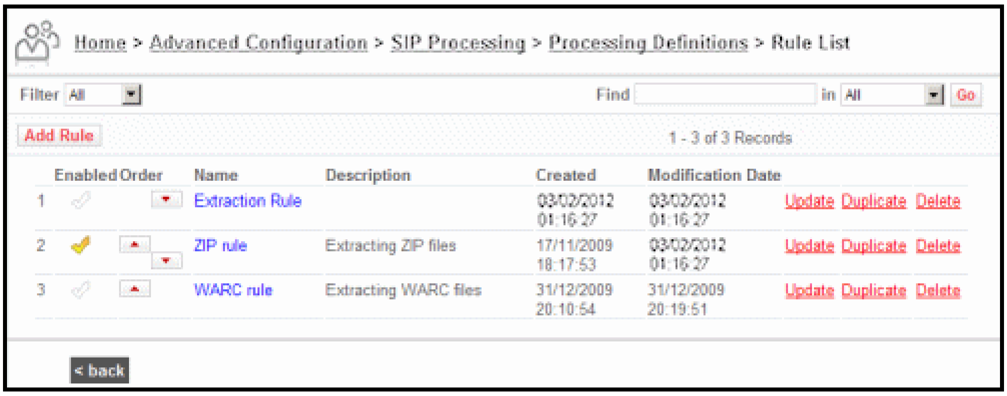


Figure 79: Rule List Page for Bytestream Extractions

The list can be filtered by All, Active, and Inactive rules. The page also includes a search field that allows the user to narrow the display of bytestream extraction rules. Drop-down attributes following the **Find** *[term]* **in** equation (such as the attributes/fields **Name** and **Description**) can be used to focus a list containing many entries.

The Bytestream Extractions Rule List page allows for additional actions described in the table below.

Table 21. Bytestream Rule List - Available Actions

Action	Description
Add Rule	Launches the Bytestream Extraction Rule Editor in Add mode. Allows the user to add a new rule. See **Adding a Bytestream Extraction Rule** on page 135.
Enable/Disable check mark	A clear check mark indicates that the rule in that row is inactive. A filled-in check mark indicates that the rule in that row is active. When a rule is deactived, the system ignores the rule when processing incoming SIPs. Clicking the check mark will toggle the value from activated to deactivated and vice versa.
Order	If more than on rule is active, the order of the rules (top to bottom, lowest number to highest), determines the order in which the rules are processed. Users can click the up and down triangles to change the order of a rule.
Rule Name / Update	Launches the Bytestream Extraction Rule Editor in Update mode (the values and operators of this rule's parameters are loaded into the editor). See **Edit/Update** on page 137.
Duplicate	Adds a new entry to the Rules List that is identical to the rule in this row. The system refreshes the Rules List. See **Duplicate** on page 137.
Delete	Deletes the rule in this row. See **Delete** on page 137.

Adding a Bytestream Extraction Rule

Users can add a bytestream extraction rule from the Rule List page for bytestream extractions.

To add a new extraction rule:

1. From the Rule List page for bytestream extractions, click the **Add Rule** button.

   The Bytestream Extraction Rule Editor opens in Add mode (see figure below).

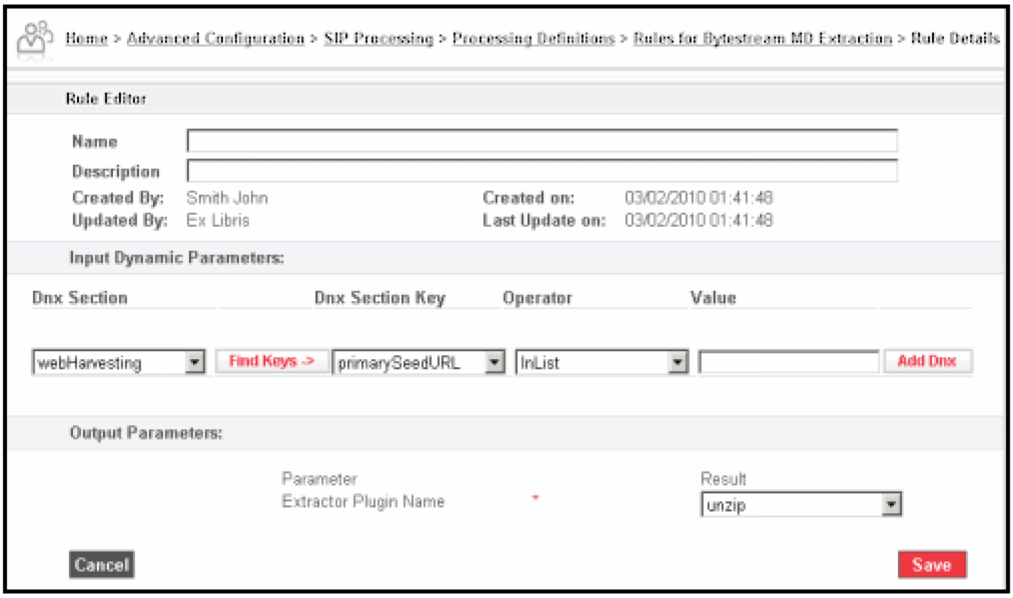


Figure 80: Rule Editor - Adding a Bytestream Rule

The page is divided into three sections: rule details, Input Dynamic Parameters, and Output Parameters. The input parameters are dynamic and user-defined based on drop-down and text fields. The output parameters are fixed; users cannot add or delete them, though they can select a plug-in from the drop-down list.

2 Enter a name and description for the rule in the top pane of the Rule Editor.

3 To add an input parameter from the DNX elements, enter values in the Input Dynamic Parameters section by creating an equation from left to right, as follows:

   a Select an item from the **Dnx Section** drop-down menu.

   b Click the **Find Keys** button to display keys belonging to the section selected.

   c Select an item from the **DNX Section Key** drop-down menu.

   d Select an operator from the **Operator** drop-down list. For a complete explanation of operators, see **Operators Used in Rule Parameters** on page 48.

   e Enter the value you want to search for in the DNX parameter.

   f Click the **Add Dnx** button.

   The page refreshes with the input parameter you defined displaying between the section headings and the fields.

4 To select an extractor plug-in for an output parameter, select a plug-in name from the drop-down field next to the Extractor Plugin Name.

NOTE:
Users cannot select output parameters but may be able to select the plug-ins associated with those parameters.

5 Click the **Save** button. (To discard the rule, click the **Cancel** button.

The new rule displays in the list of rules for bytestream extractions. By default, the new rule appears at the bottom of the list and is enabled.

Additional Bytestream Rule Actions

In addition to adding a new rule, the following actions can be performed from the Rule List page:

Edit/Update

Edit any rule listed on the Rule List page by clicking the name of the rule or the **Update** text link in the row of the rule.

The Bytestream Extraction Rule Editor opens with information for the rule selected.

Make changes to the Name, Description, or input parameters for the rule. Add or delete any parameters. For a complete explanation of operators, see **Operators Used in Rule Parameters** on page 48.

If available, users can also change the selection for the output plugin.

Duplicate

Use the duplication feature to create a back-up of an existing rule or to create a new rule with many of the same values and attributes as an existing rule.

To create a copy of a rule, click the **Duplicate** text link in the row of the rule you want to copy. The system does the following:

- Adds an identical rule to the database
- Names the duplicated rule `Copy of` *`[original rule name]`*
- Refreshes the Rule List page with the newly duplicated and named rule

Edit/update the new rule as needed.

Delete

To delete a rule from the Rule List page (and from the Rosetta system), click the **Delete** text link in the rule's row. Confirm the action when the confirmation box opens. The Rule List page refreshes without the deleted rule.

9

User Management

This section contains:

Understanding Rosetta System Users

Various types of users interact with the Rosetta system. Some of these users (such as Producer Agents) provide content, while other users (such as staff users) configure the way this content is processed by the Rosetta system. For general information about Rosetta system users, see Rosetta Users in the *Rosetta Overview Guide*.

In Rosetta, the role of User Manager adds, maintains, and deletes users and their roles. Included in creating and defining roles is the determination of actions available to different users. Managers classify users by working with the following components:

- **User Profiles** on page **140**
- **User Type** on page **142**

User Profiles

The actions that a user can perform in the Rosetta system are defined by the user profile. User profiles define the following parameters:

- User role (see **User Roles** on page **140**)
- User role parameters (see **User Role Parameters** on page **141**)
- User role permissions (see **User Role Permissions** on page **141**)
- User scope (see **User Scope** on page **142**)
- User type (see **User Type** on page **142**)

To allow a user to work with the Rosetta system, the User Manager must associate the user with a user role profile. Otherwise, a user cannot perform any actions within the system.

User Roles

User roles define the actions that a user can perform within the Rosetta system framework. The following roles are supported:

Table 22. Rosetta User Roles

Role	Description
Producer Agent	Deposits the content provided by Producers. (For more information, see Producers and Producer Agents in the *Rosetta Producer's Guide*.)
Deposit Manager	Configures generic Producer profiles and material flows. (For more information, see Part II, Deposit Managers in the *Rosetta Staff User's Guide*.)
Negotiator	Personalizes generic Producer profiles and material flows for the needs of specific Producers. (For more information, see Part III, Negotiators in the *Rosetta Staff User's Guide*.)
Assessor, Arranger, Approver	Reviews the content that Producer Agents deposit. (For more information, see Part IV, Assessors, Arrangers, and Approvers in the *Rosetta Staff User's Guide*.)
Technical Analyst	Resolves technical issues that occur with the content that Producer Agents deposit. (For more information, see Part V, Technical Analysts in the *Rosetta Staff User's Guide*.)
Editor	Edits metadata of the content deposited by Producer Agents, and adds new representations.

Table 22. Rosetta User Roles

Role	Description
Data Manager	Schedules and monitors processes, manages sets, publishes configurations, and runs activities that affect multiple IEs.
Preservation Analyst	Performs all tasks associated with risk analysis and loss prevention, including populating Preservation libraries, performing risk analyses on existing library collections, and creating, testing, and running plans and plan alternates.
Preservation Manager	Performs all tasks associated with risk analysis and loss prevention, including all the responsibilities of a Preservation Analyst plus signing off on and rejecting preservation plans.
User Manager	Creates and manages user accounts. (For more information, see **Managing Users** on page **145**.)
ExLibris Support	Reserved for use by the Ex Libris support team.
Back Office Administrator	Configures the Rosetta system and working environment

Multiple roles can be assigned to a single user. For example, a User Manager can associate a user with the roles of Deposit Manager and Producer Agent, which enable the Deposit Manager to not only configure the Rosetta system, but to deposit content as well. Alternatively, each role can be associated with a separate user.

The list of user roles and their responsibilities are predefined and cannot be changed by User Managers. (For example, the Rosetta system does not enable adding a new role.) However, User Managers can enable or disable particular actions within a role for a specific user.

User Role Parameters

User role parameters determine which particular predefined role actions are available to a specific user.

For example, a User Manager can use role parameters to assign a certain Producer group (such as Published and Un-Published) to a Technical Analyst. An Assessor might be assigned a parameter for which kind of metadata to edit - descriptive, source, or access rights.

User Role Permissions

User role permissions determine the degree to which a user can make changes to data in the system. The three levels of permissions are:

- View - can view objects but not edit or delete any kind of data.
- Typical - can edit but not delete data in the system.
- Full - can edit and also delete data in the system.

User Scope

User roles are also associated with scope in terms of their level within a consortium.

- Consortium - Users with this scope can view and operate on objects that belong to all of the institutions in the consortium collectively. The following roles can have this scope: SystemAdministrators, Editors, Data Managers, Preservation Analysts, and Preservation Managers.
- Institution - Users with this scope can work only on items (IEs, configuration items) within their own institution. All roles can be assigned an institutional scope.
- Department - Users with this scope can operate only on IEs that belong to their department. This scope is only relevant for Editors.

User Type

The Rosetta system enables User Managers to group users into types, as described in the following table.

Table 23. The Rosetta System User Types

User Type	Includes...
Public	Producer Agents **NOTE:** Individual Producers are considered Producer Agents who deposit content on their own behalf.
Staff	■ Deposit Managers ■ Negotiators ■ Assessors, Arrangers, Approvers ■ Technical Analysts ■ Editors ■ Administrators

Table 23. The Rosetta System User Types

User Type	Includes...
Organization	Group Producers **NOTE:** Organization users cannot log in to the Rosetta system and work with the system directly. Producer Agents who are associated with Group Producers can deposit content on these Producers' behalf.
Contact	Individual users who serve as contacts for Group Producers. A contact user can either be one of the Producer Agents, or a dedicated user. **NOTE:** Contact users cannot log in to the Rosetta system and work with the system directly unless they are associated with the Producer Agent role.

Registration Process and Rules

When Producer Agents register in the Rosetta system, they must specify the type of material they plan to deposit by selecting one of the predefined options. Administrators can define these options using the Registration Reason code table.

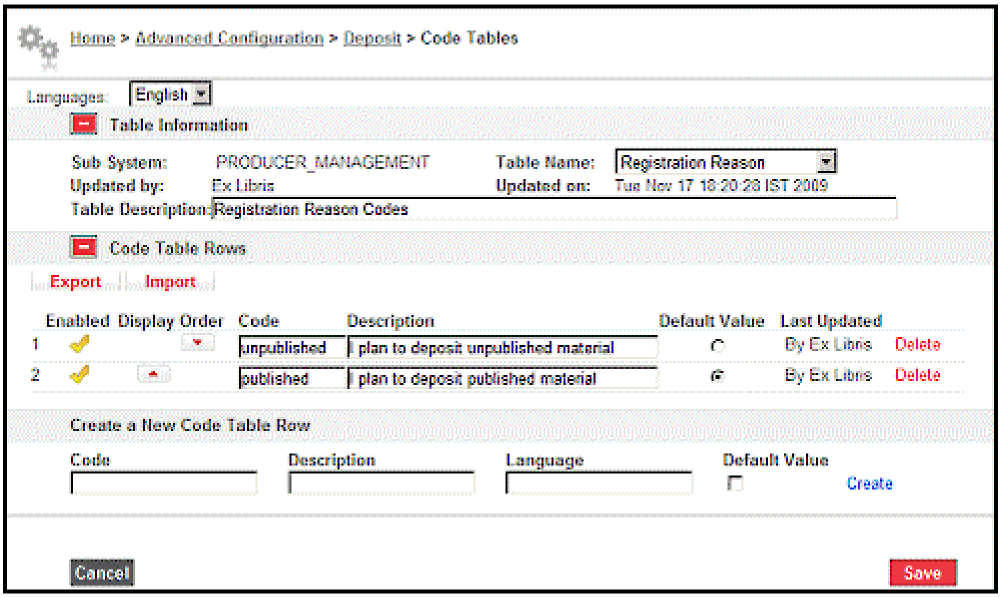


Figure 81: Registration Reason Code Table

When a new Producer is registered in the Rosetta system, the system automatically assigns a Producer profile, Producer group, and a status to the new user. Administrators can configure this assignment using the Deposit Registration Rules mapping table.

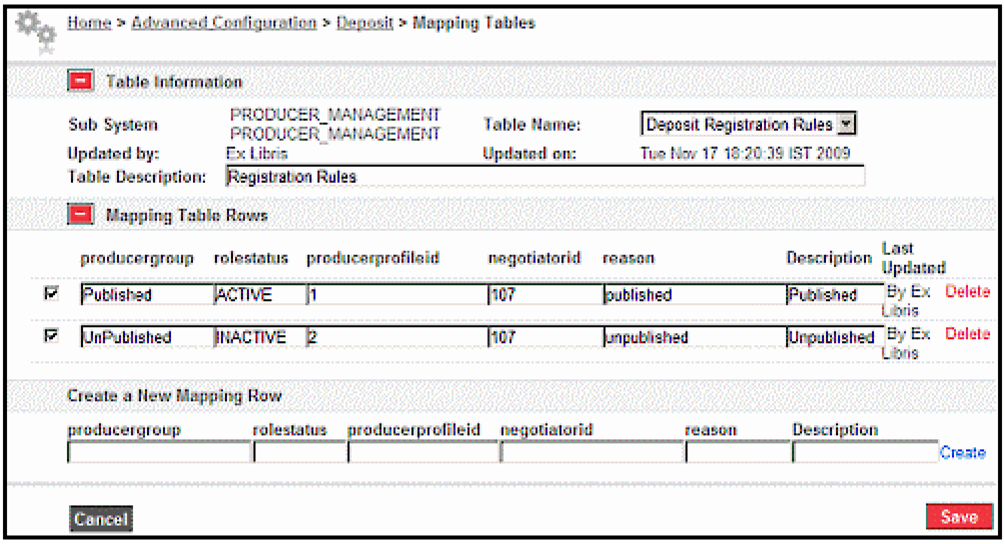


Figure 82: Deposit Registration Rules Mapping Table

Administrators can work with the Deposit Registration Rules mapping table as described in **Working with Mapping Tables** on page 232.

Managing Users

NOTE:
Administrators require the User Manager role to manage users in Rosetta.

The Rosetta system enables Administrators to manage different types of users, which includes adding new users, searching users, and deleting users. Administrators can manage users from the User List page.

To access the User List page, follow the path from the Advanced Configuration page to **Users > User Management**.

The following actions can be performed on this page:

- **Adding a User** on page **145**
- **Updating a User** on page **150**
- **Deleting a User** on page **151**

Adding a User

Administrators can add a new user to the Rosetta system. The process of adding a new user consists of the following steps:

1. Providing user information, such as a user name, password, and status
2. Assigning a role
3. Providing information about the role, which includes defining role parameters

To add a user:

1. On the User List page (see **Managing Users** on page **145**), click **Add User**.

   The User Details page opens.

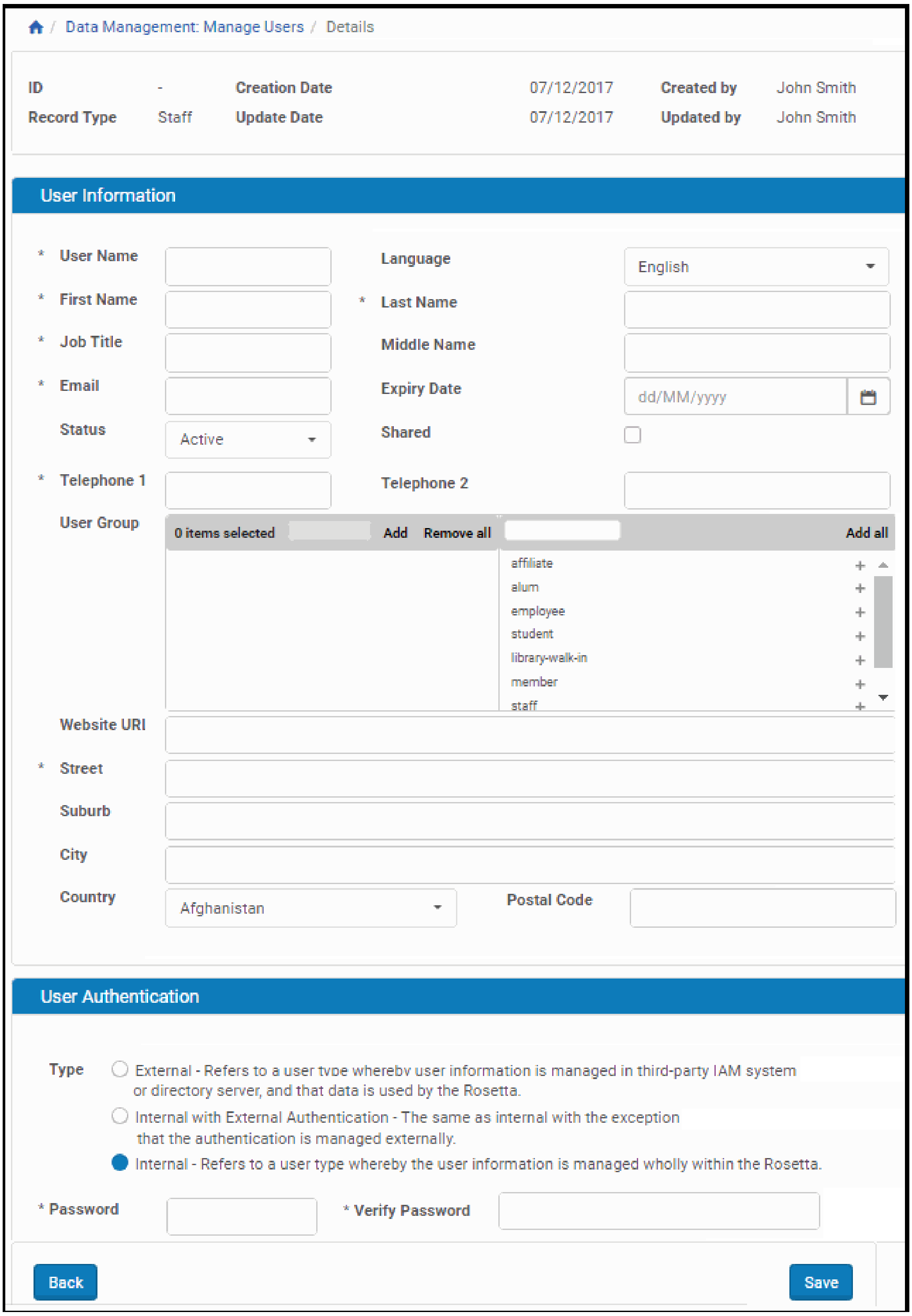


Figure 83: User Details Page

2 In the **User Information** page, provide the information as requested. For the User Group section, select the user groups to which you want to assign the user. To add a new user group, enter the name of the user group and click **Add**.

NOTE:
All fields with an asterisk (*) are mandatory.

3 Click **Save**. The Add New Roles page opens.

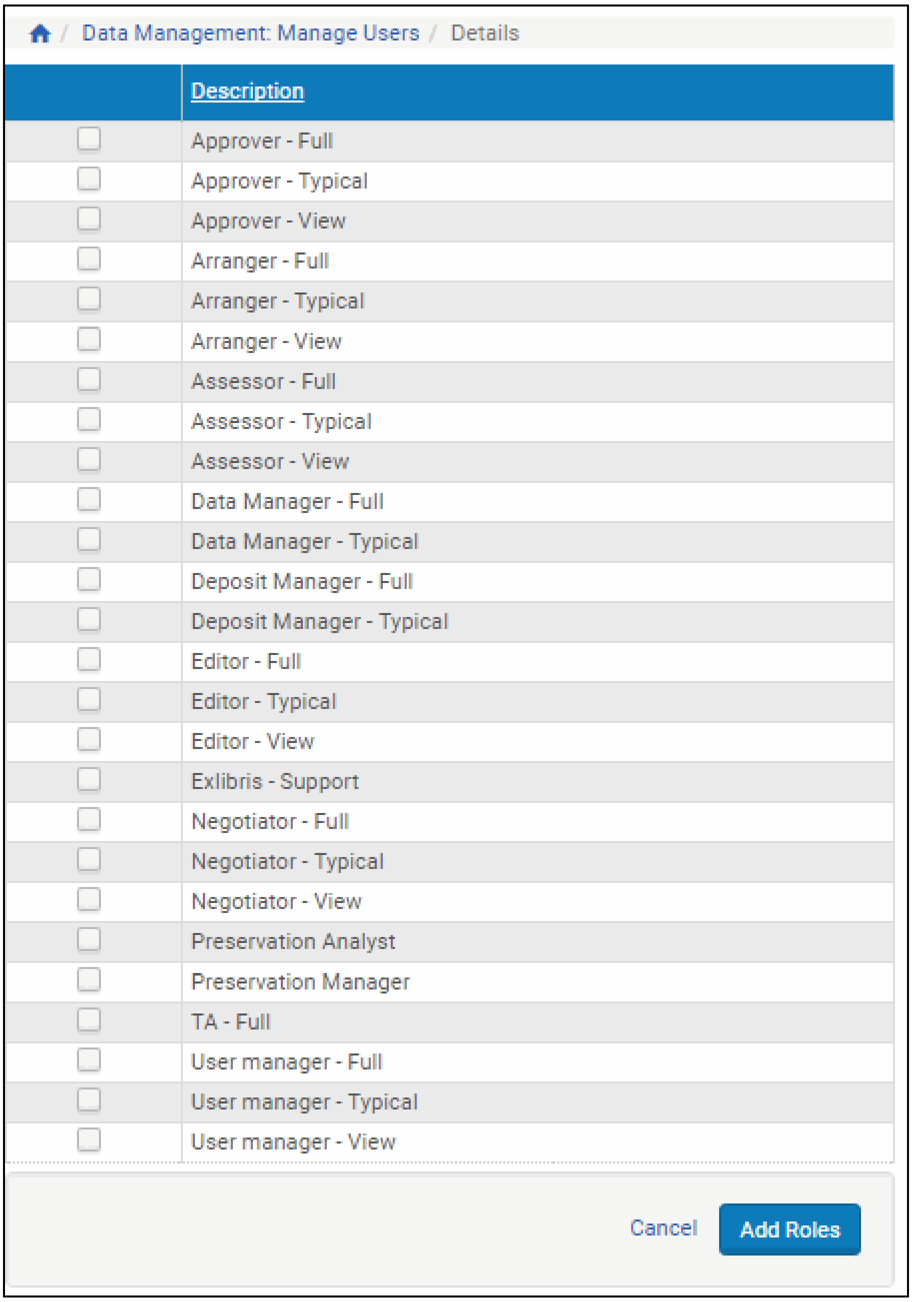


Figure 84: Add New Roles Page

4. Select the roles that you want assign to the user. For detailed information, see **Working with User Roles** on page 153.
5. Click **Add Roles**. The User Role Details page opens.

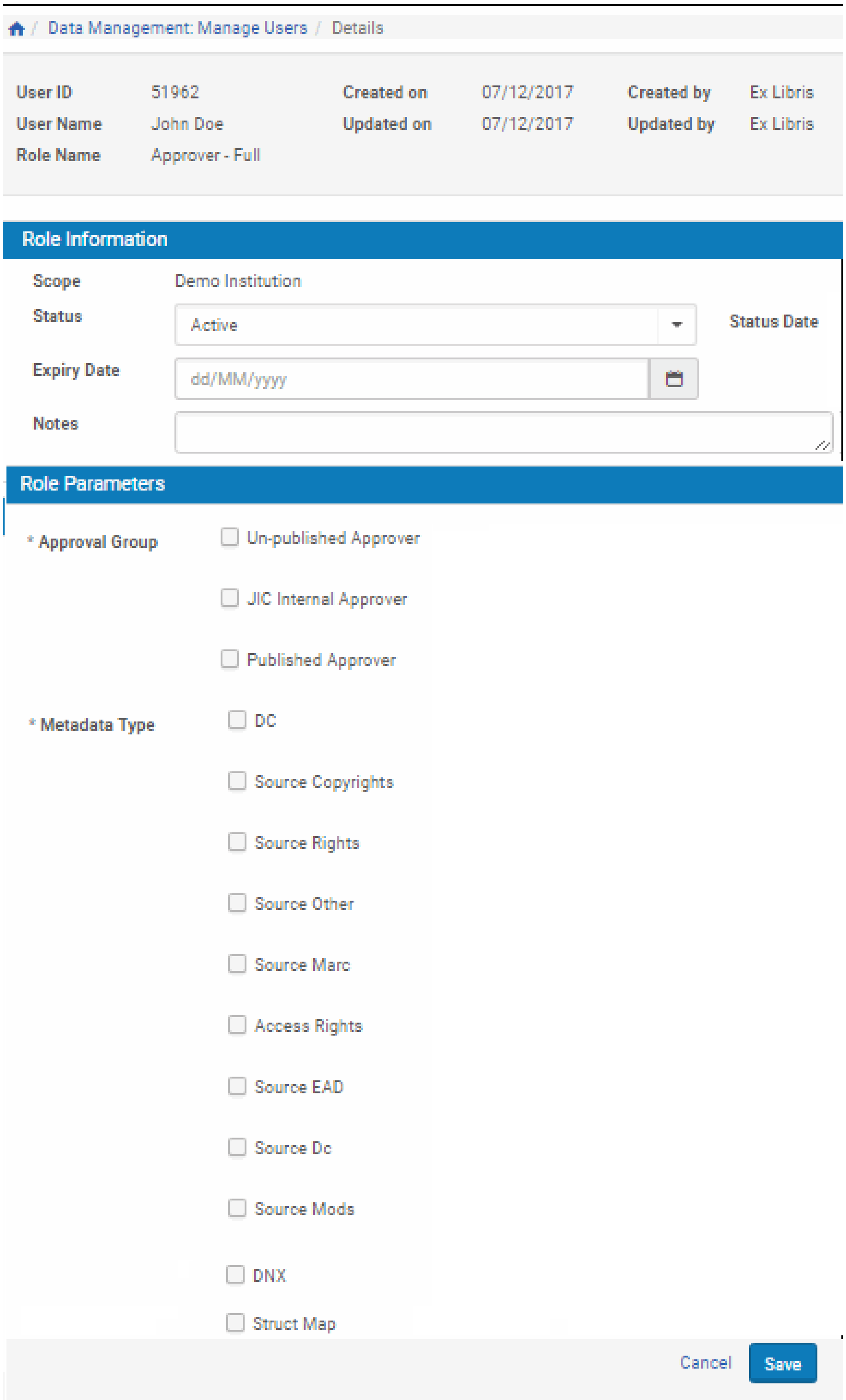


Figure 85: User Role Details Page

6 Provide the information as requested.

NOTE:
The list of parameters displayed in the User Role Parameters pane varies depending on the user role.

7 Click **Save**. The new user is saved in the Rosetta system.

The user now can log on and work with the Rosetta system, according to the defined user role.

Cloning a User

To create a new user with the same roles as an existing one, you can clone the existing one. Cloning creates the same user with the following characteristics and limitations:

- Limited to Staff users
- In the Management (institution) UI, cloning is limited to roles scoped to the current institution
- In the Administration (consortium) UI, roles across all institutions are duplicated

Note: User roles cannot be edited until the new user's information is saved. After adding user information, click **Save** to save a user with the same roles, or click **Apply** to save the user information and edit the user roles.

Updating a User

Administrators can update both the general user information and the user roles of an existing user.

To update a user:

1 On the User List page (see **Managing Users** on page **145**), locate the user you want to update and click **Update**. The User Details page opens.

Figure 86: User Details Page

2 In the **User Information** pane, modify the fields that you want to update.

3 In the **User Role** pane, add, change, and delete roles as requested.

4 Click **Save**.

The updated user information is saved in the Rosetta system.

Deleting a User

To remove a user from the system and prevent all further access by that user, Administrators can delete an existing user.

To delete a user:

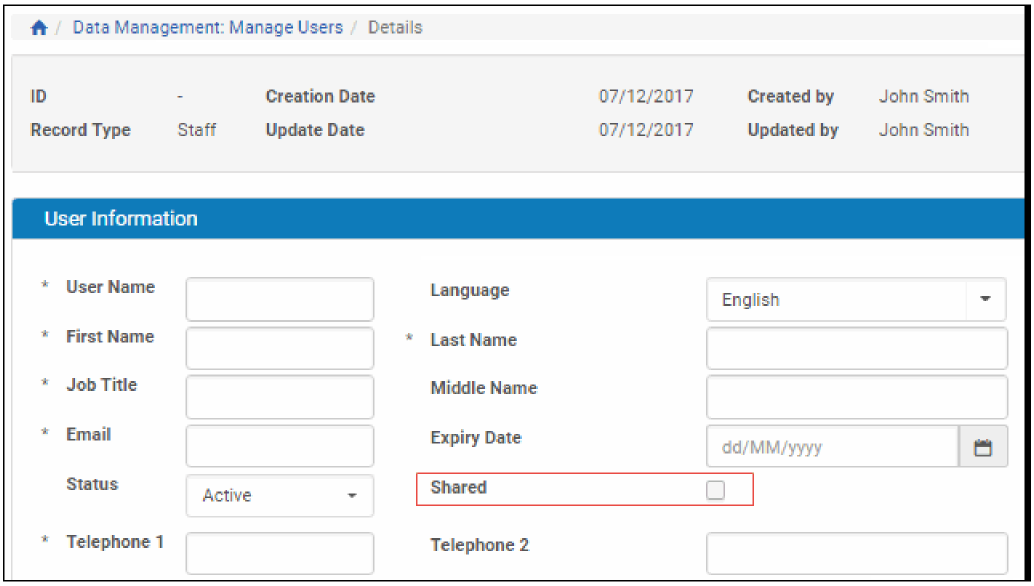
1 On the User List page (see **Managing Users** on page **145**), locate the user you want to delete and click **Delete**. The confirmation page opens.

2 Click **OK**.

The user is deleted from the Rosetta system.

Sharing Users

You can choose to share your users with other institutions, allowing them to access these users with their management interface according to roles assigned by the user manager of the respective institution. To share users, select the **Shared** checkbox when configuring the user.



NOTES:

- Only Administration User Managers and the institution that created the user can set the **Shared** checkbox.
- If the user has been assigned roles in another institution, the **Shared** checkbox cannot be cleared until those roles are removed.
- If a Contact user is connected with a Group Producer created in another institution, the **Shared** checkbox cannot be cleared until the connection is removed.

Configuring User Parameters

Administrators configure code tables that define the following user parameters:

- Producer groups
- Material types
- Producer classification
- Local fields for describing a Producer, if necessary
- Approver groups

Administrators can access these code tables from the Code Tables List page. For more information, see**Working with Code Tables** on page **228**.

Working with User Roles

The Rosetta system enables Administrators to manage user roles that are assigned to individual users, which includes performing the following actions:

- **Assigning a User Role to a User** on page **153**
- **Updating a User Role** on page **156**
- **Activating and Deactivating a User Role** on page **157**
- **Deleting a User Role** on page **158**
- **Configuring Automatic E-mails to Users** on page **158**

For detailed information about the roles and their privileges, see the Excel workbook in the Customer Knowledge Center: **Rosetta > Product Documentation > Version 5.5 > Rosetta Roles and Privileges.xls.**

Assigning a User Role to a User

A user role, such as Assessor or Technical Analyst, defines the user's functions and privileges. Administrators can assign multiple user roles to a user.

To assign a user role to a user:

1. On the User List page (see **Managing Users** on page **145**), locate the user to whom you want to assign a role and click **Update**. The User Details page opens.
2. In the **User Roles** pane, click **Add Role**. The Add New Roles page opens.

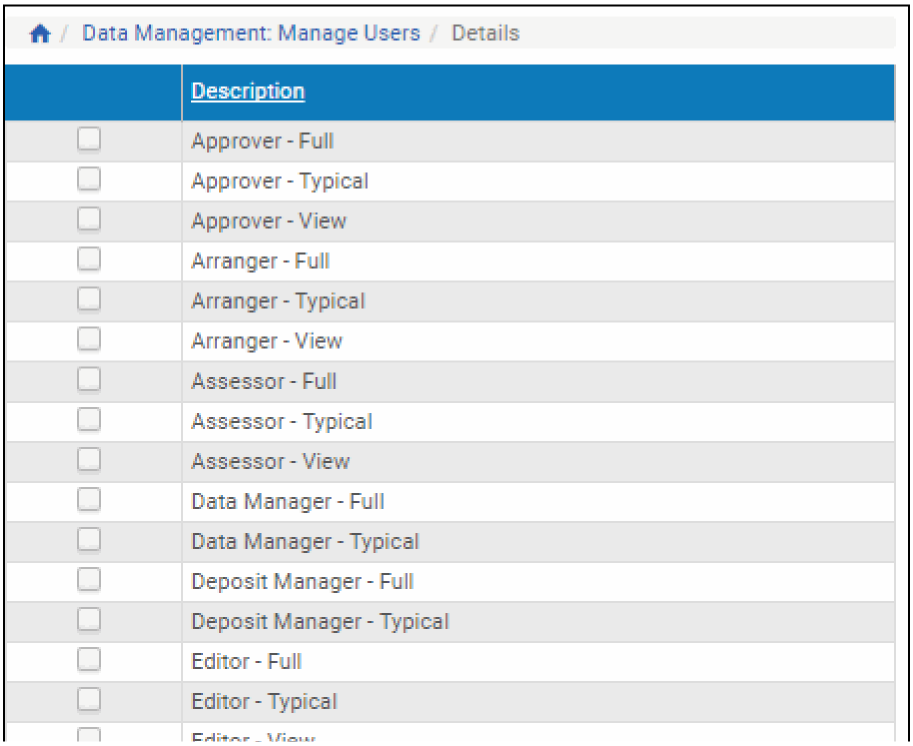


Figure 87: Add New Roles Page

3. Select the roles that you want to assign to the user.
4. Click **Add Roles**. The User Role Parameters page opens.

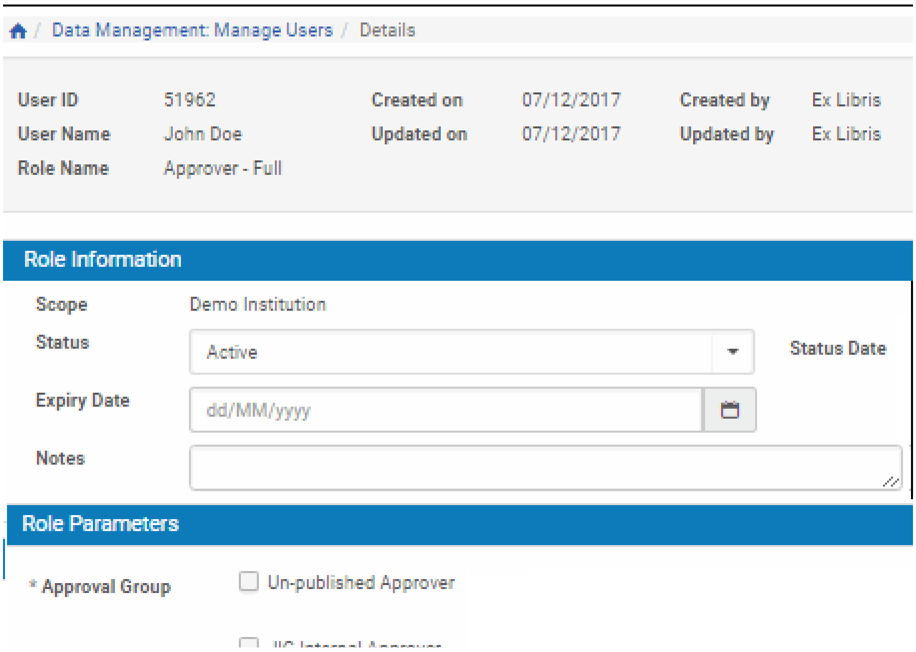


Figure 88: User Role Parameters Page

5 In the **User Role Information** pane, complete the fields as described in the following table:

Table 24. User Role Page Fields

Field	Description
Scope	The consortium, institution, or department to which the user belongs and to which the user's actions apply. The user role is relevant only to this scope.
Status	The status of the user. The following options are available: ■ **New** - A new Producer Agent who has recently registered in the Rosetta system, but is not yet approved by a Negotiator ■ **Active** - A user account that is enabled and can be used ■ **Inactive** - A user account that is disabled and cannot be used
Expiry Date	The date on which the user role must expire, if applicable.
Note	Comments that an Administrator can write about the user role.

6 In the **User Role Parameters** pane, select all the parameters that apply to the user.

7 Click **Save**. The User Details page opens. The user role is assigned to the user.

8 Repeat steps 1–7 to add additional roles, if necessary.

9 Click **Save**.

The user can now work with the Rosetta system as defined by the user roles.

Updating a User Role

Administrators can update an existing user role.

To update a user role:

1 On the User List page (see **Managing Users** on page **145**), locate the user to whom you want to assign a role, and click **Update**. The User Details page opens.

Figure 89: User Details Page

2 In the **User Roles** pane, locate the user role you want to update and click **Update**. The User Role Parameters page opens.

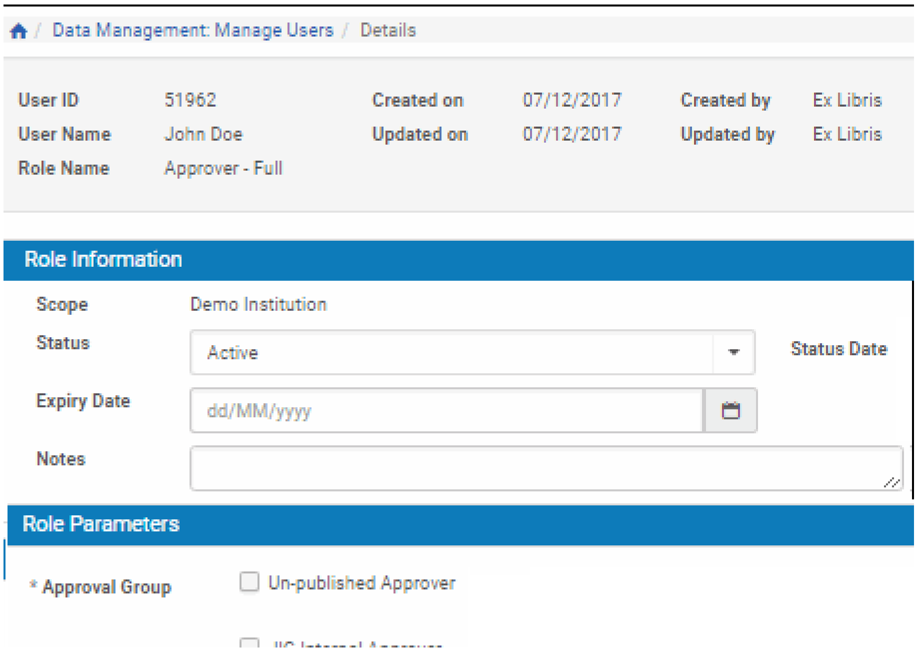


Figure 90: User Role Parameters Page

3 Modify the fields that you want to update.

4 Click **Save**. The User Details page is re-displayed.

5 Repeat steps 1 - 4 for additional user roles, if necessary.

The user can now work with the Rosetta system as defined in the updated user role.

Activating and Deactivating a User Role

Administrators can deactivate a user role when they need to finish configuring the user role parameters, or if they want to temporarily disable the role without deleting it. Administrators can activate an inactive user role at any time.

When a user role is deactivated, the user no longer has this role privilege in the Rosetta system. For example, deactivating a Negotiator role means that the user can no longer perform Negotiator functions. Conversely, activating a user role grants the user this role privilege in the Rosetta system.

On the User Details page, the status of the user role is indicated by the check mark in the **Active** column:

- Yellow = active.
- Grey = inactive.

To activate or deactivate a user role:

1. On the User List page (see **Managing Users** on page **145**), locate the user with which you want to work and click **Update**. The User Details page opens.
2. In the **User Roles** pane, locate the user role you want to activate or deactivate.
3. In the **Active** column, click the check mark. The check mark in the **Active** column indicates the new status. The user role status is changed from active to inactive, or from inactive to active.
4. Click **Save**.

The user can now work with the Rosetta system as defined by the active user roles assigned to this user.

Deleting a User Role

Administrators can delete an existing user role. After a user role is deleted, the user no longer has this role privilege in the Rosetta system. For example, deleting a Negotiator role means that the user can no longer perform Negotiator functions.

To delete a user role:

1. On the User Details page (see **Managing Users** on page **145**), in the **User Roles** pane, locate the user role you want to delete and click **Delete**. The confirmation page opens.
2. Click **OK**. The User Details page is re-displayed.
3. Click **Save**.

The user can no longer perform the actions that were defined in the deleted user role.

Configuring Automatic E-mails to Users

System Administrators can configure e-mail notifications to be sent to Producers or Producer Agents when two types of changes occur:

- **E-mail Notifications for Change in User Status** on page **159** and
- **E-mail Notifications for Deposit Activity** on page **71**.

E-mail Notifications for Change in User Status

This is the e-mail that Rosetta system users receive when changes in a user's status occur (for example, changing a user role or assigning a Producer Agent to a Producer).

NOTE:
Currently, notifications are only sent when a Producer Agent is created or a user role is changed.

System Administrators define the text and style of these notifications by configuring XSL files.

To configure e-mail notifications:

1. On the Advanced Configuration page, click **General**. The General page opens.
2. Click **Configuration Files**. The Configuration Files page opens.
3. In the **File Group** drop-down list, select **Deposit Configuration**.
4. In the **File Subgroup** drop-down list, select **E-mail Formatting**. The list of configuration files is filtered, and the XSL files that define notifications text and look-and-feel are displayed.

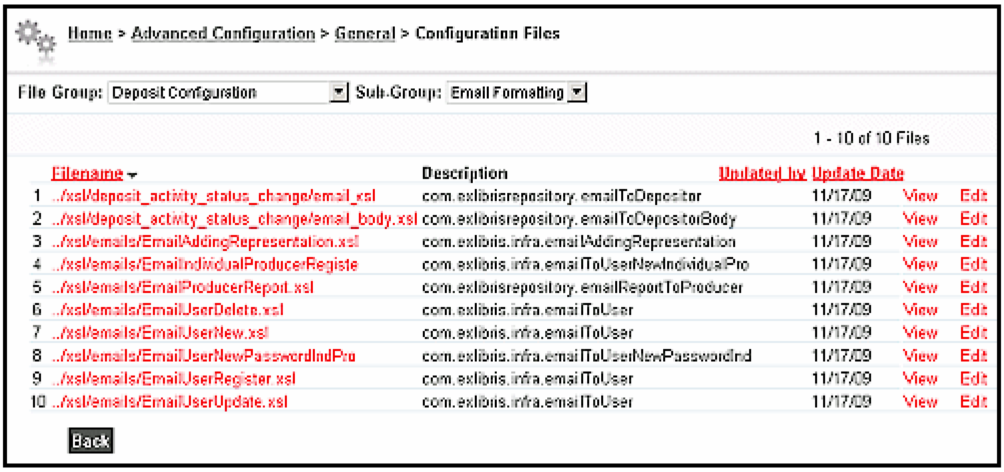


Figure 91: E-Mail Notification Configuration Files

5. Locate the notification you want to configure and click **Edit**.

   The Edit Configuration File opens. The XSL for the file displays in an editable pane.

Figure 92: Edit Configuration File Page

6 Modify the file as required and click **Save**.

The Rosetta system now sends e-mail notifications as defined in the updated XSL file.

Defining User Mandatory Fields

A System Administrator can designate mandatory fields for user records. These designations are relevant for all users stored in Rosetta, regardless of their authentication by the PDS. Both external users (authenticated in the LDAP, for example) and internal users (authenticated by Rosetta) are required to enter values in the designated mandatory fields.

Administrators define mandatory fields during advanced configuration using code tables, as described in the following table.

Table 25. User Mandatory Field Code Tables

User Category	Code Table
Producers	Organization Users
Producer Agents and Staff Users	Users

Administrators can access each of these code tables from the Users page.

Administrators work with the user mandatory fields code tables as described in **Working with Code Tables** on page **228**.

User Authentication with SAML

SAML enables Rosetta to exchange authentication and authorization information, allowing a user to sign in or out of an external system and be automatically signed in or out of Rosetta, or vice versa. Rosetta supports the SAML 2.0 Web Browser SSO profile.

For a more information concerning SAML-based SSO for Rosetta, see https://developers.exlibrisgroup.com/rosetta/integrations/saml

To configure the SAML authentication profile:

1 From the Rosetta Administration module, click **Users > Authentication Profiles > Add Authentication Profile**. The following page is displayed:

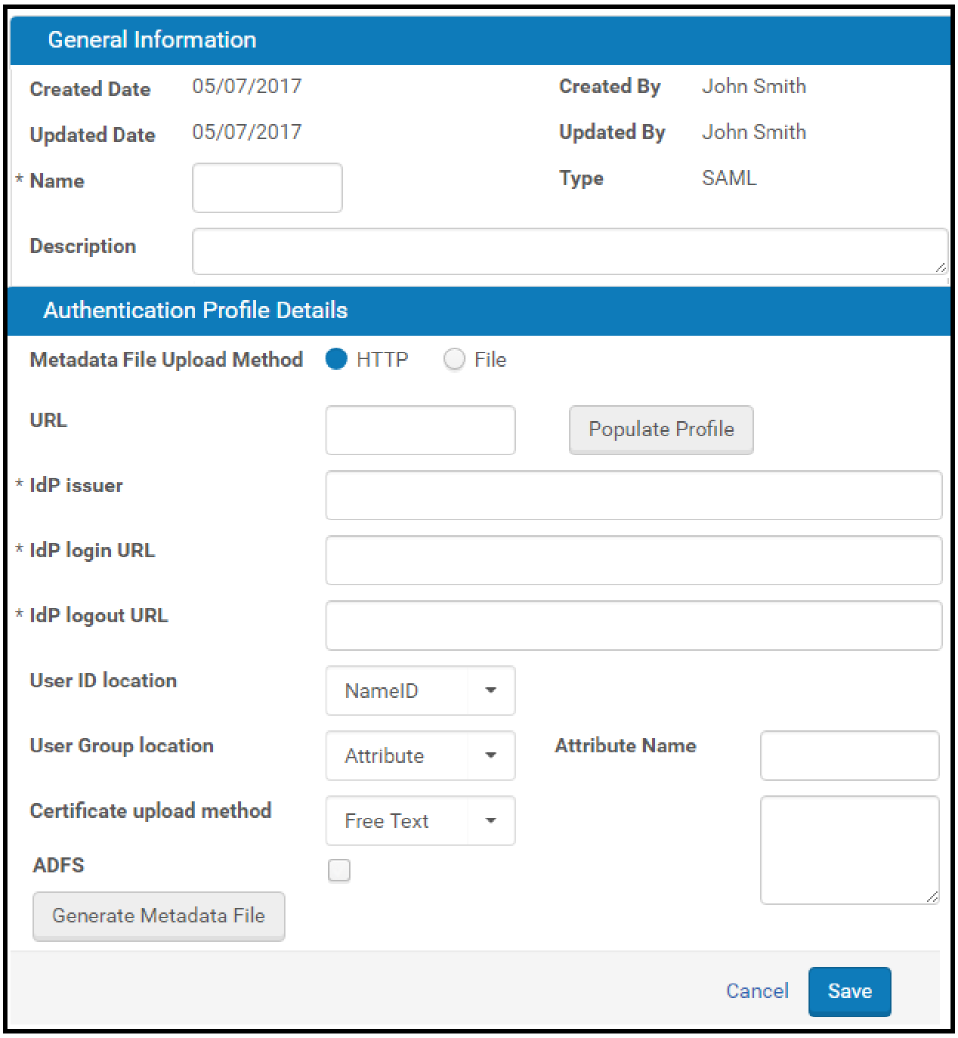


Figure 93: Authentication Profile Details

2 Enter a name and description for the profile.

3 You can populate the profile information from metadata. To use a metadata link, select **HTTP** and provide the location of the link in the URL field. To use a metadata upload, select **File and** select the file. For more information about this file, see https://developers.exlibrisgroup.com/rosetta/integrations/saml.

4 Click **Populate Profile** to populate the profile information.

5 If you do not populate the profile from metadata, enter the settings for the **IdP issuer**, **IdP Login URL**, **IDP Logout URL**, an d **User ID Location**.

6. For **User Group Location**, select **Attribute** and for **Attribute Name**, enter the name of the attribute in the SAML XML file that contains the user group list.
7. In Certificate upload method, select the type of certificate to upload. Alma accepts certificate file uploads and free-text certificate entry. If you select **Free Text**, enter the text of the certificate. If you select **File**, select the file.
8. Select **ADFS** if the IdP enables Active Directory Federation Services.
9. Click **Generate Metadata File** to generate the Rosetta metadata file that you are required to provide to the IdP.
10. Click **Save**.

10

Plug-in Management

This section contains:

As part of the Rosetta open platform approach, and to allow customers to apply their own logic and tools to Rosetta, a mechanism for installing and using plug-ins has been implemented in Rosetta. This mechanism is available through the Administrative interface.

This chapter will cover the supported plug-in types from functional and implementation perspectives. It will not cover technical aspects of the plug-in framework. For technical information, see the Plug-in Guide documentation in the Developer's Network (https://developers.exlibrisgroup.com/rosetta/sdk/plugins).

Archive Decomposer

The Decomposer represents the plug-in family of all classes/programs of varied packed/compressed files that handle a decomposition.

The decompression of containers is invoked from two areas of the system:

1 Web Deposit – according to the material flow definition, the container (e.g. zip file) is decomposed into the inner files using the plug-in. In this case, the container is disregarded and only the inner files are ingested into Rosetta as they were in the original streams.

2 Validation Stack – according to decomposition rules, a container (e.g. multi-page TIFFs) is decomposed into bitStreams (retained only in the operational DB). These inner files, the bitStreams, also pass through the ValidationStack (that is, identification, tech-md-extraction, risk-extraction) and participate in the risk report.

Plug-in Parameters

The Archive Decomposer requires two parameters:

- Full file name (including full path) – full name of the container input file
- Directory name - where the inner files will be extracted to

Usage

Once installed, the Archive Decomposer can be used as the decomposing tool in the following decomposition rules setup.

Decompose at the Time of Loading

Rosetta can decompose a compound file while loading it onto the deposit server so that only the inner files are loaded while the original compound file is not. The tool used for decomposing the compound file is one of the installed Archive Decomposer plug-ins, which is accessible in the Automatic Decomposition Rules rule editor.

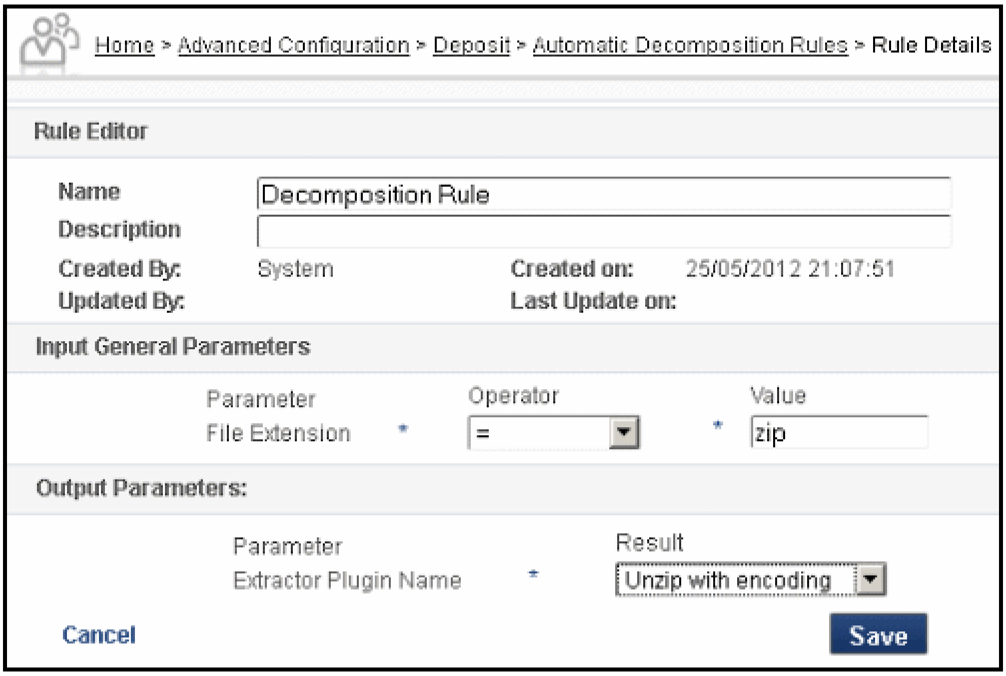


Figure 94: Decomposition Rule

ByteStream Extraction

Another use of the Archive Decomposer plug-in is the ByteStream extraction. This mechanism allows Rosetta to extract and store technical MD (needed for preservation) of each of the inner files. The tool to be used for decomposing the compound file is one of the installed Archive Decomposer plug-ins which will be accessible in the Rules for Bytestream MD Extraction rule editor.

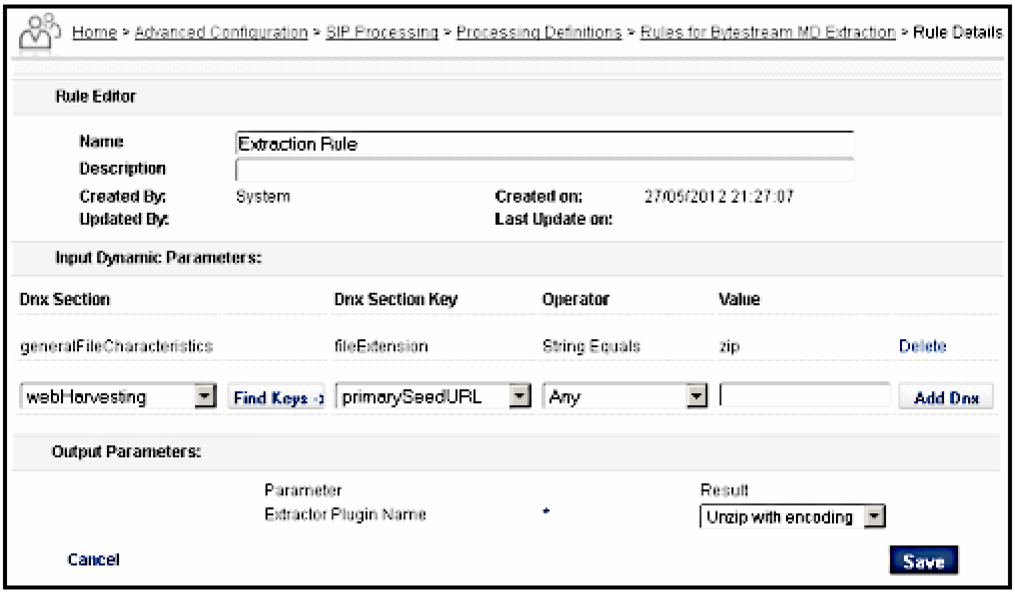


Figure 95: Bytestream Metadata Extraction Rule - Details

Implementations

Rosetta includes three implementations of the Archive Decomposer plug-in:

- decomposerArcFile – A script plug-in to decompose ARC files
- Unzip – A script plug-in to decompose ZIP files
- Unzip With Encoding – A script plug-in to decompose ZIP files that require special encoding for the inner files

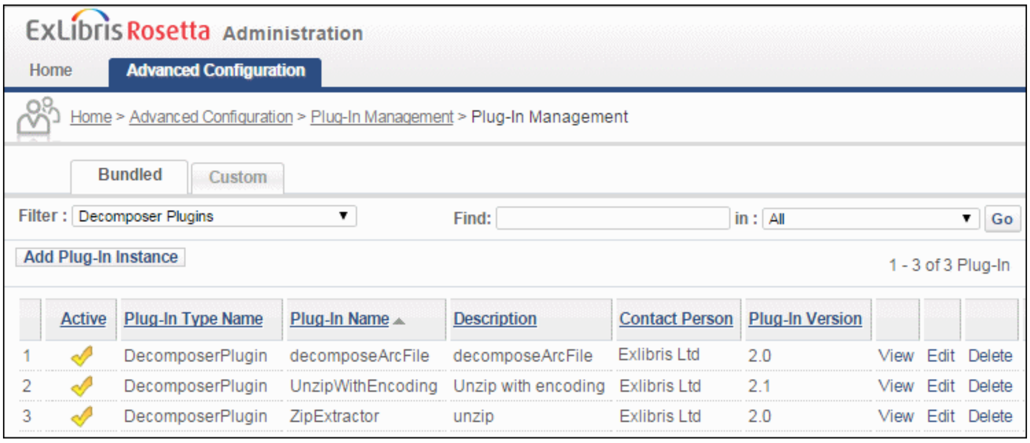


Figure 96: Decomposer Plug-in Management

Technical Metadata Extractor

The Technical Metadata Extractor (MD Extractor) represents the family of utilities that extracts the technical properties (such as size, encoding, compression) of a file. Each extractor is responsible for handling a specific file format. However, the sharing of generic extractors is possible.

The extractor plug-in exposes all the properties it can extract, and Rosetta uses this information to extract property values of a given file. The system saves the property values to the DNX, updating two sections, `significantProperties` and `fileValidation`. While the `significantProperties` section holds more standard technical properties (such as from exif, XDP), the `fileValidation` section holds more general information such as well-formedness, validity, and associated mime type.

NOTE:
The extractor must be associated with a format in the format library in order to run.

Plug-in Parameters

Depending on the specific implementation, a plug-in may or may not require parameters. If the plug-in does require parameters, they are populated during installation of a new instance of the plug-in.

Usage

The association of an MD extractor to a format is done at the format level (format library). For an MD extractor to be available at the format level, it should be assigned to the same Classification Group that the format is assigned to.

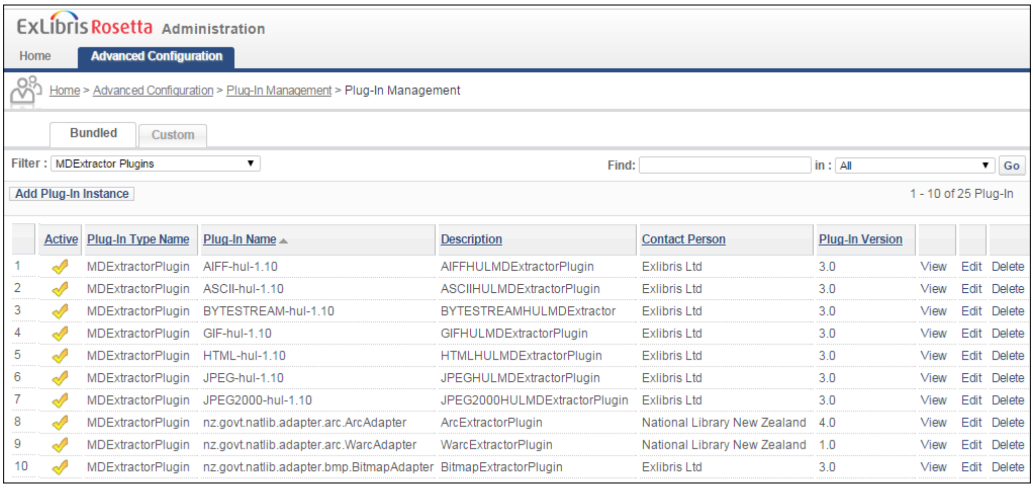


Figure 97: MD Extractor Plug-In Management

After the MD extractor is assigned to a classification, it is listed in the Related MD extractors folder of that classification group.

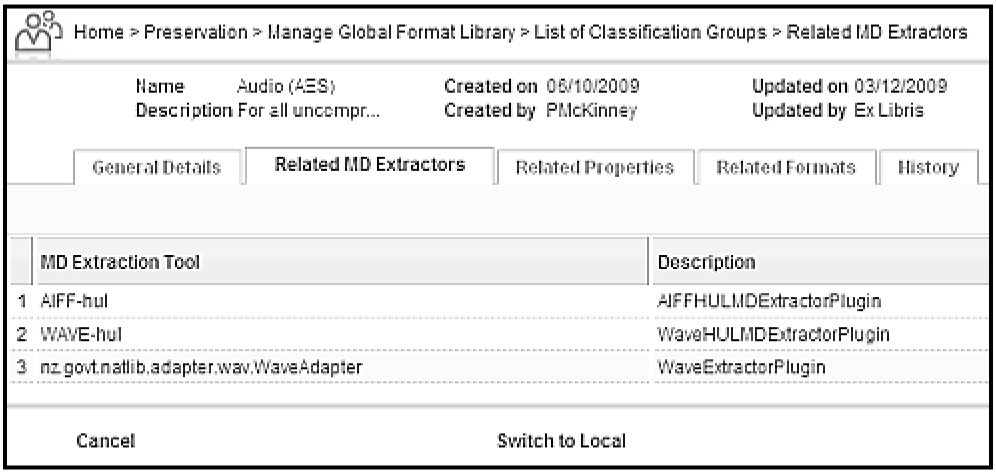


Figure 98: Metadata Extractor Tools

The same list of MD extractors will be also available in the MD extractor drop-down at the format level for all formats belonging to the same classification.

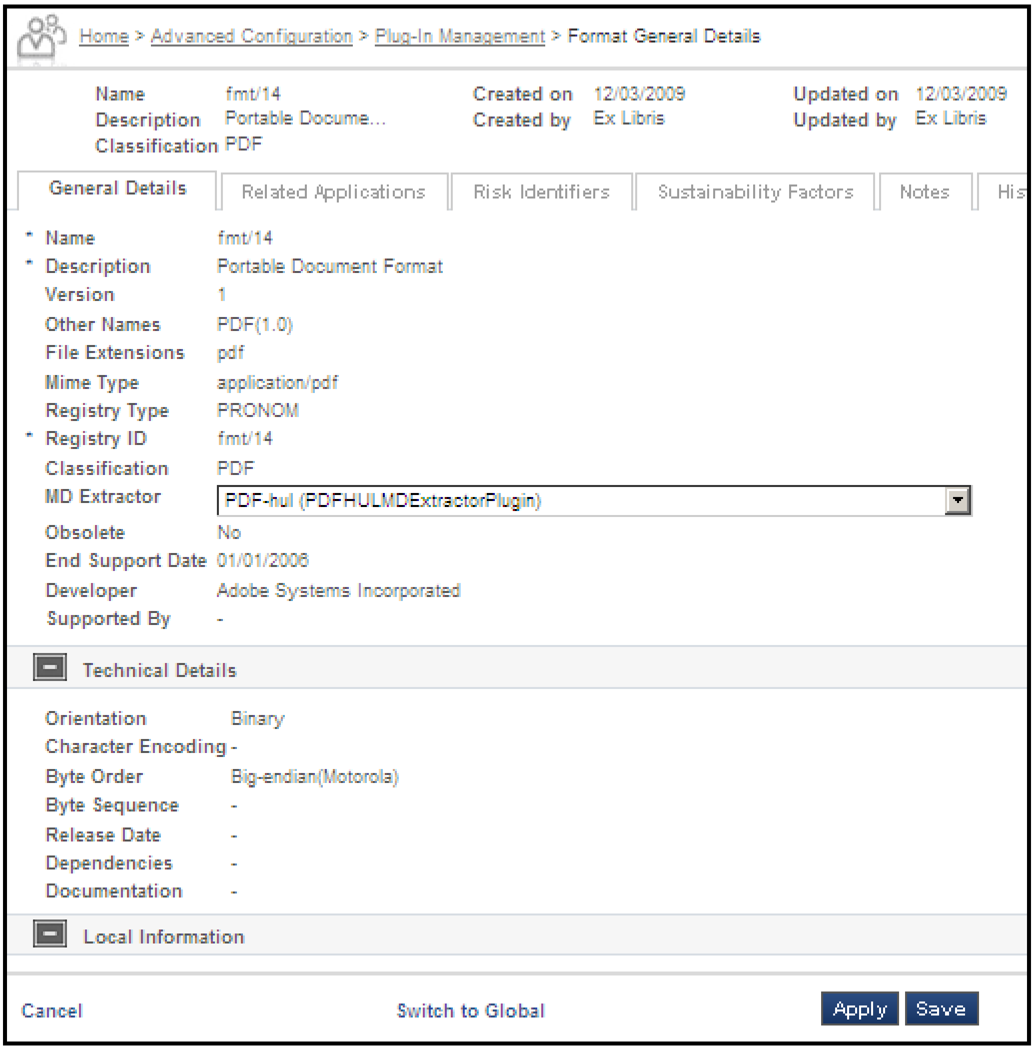


Figure 99: Metadata Extractor Drop-down Menu

Implementations

Rosetta includes the following implementations of the MD Extractor plug-in:

- JHOVE
  - BYTESTREAM-hul
  - ASCII-hul
  - AIFF-hul
  - HTML-hul
  - JPEG2000-hul
  - PDF-hul

    - JPEG-hul
    - GIF-hul
    - TIFF-hul
    - UTF8-hul
    - WAVE-hul
    - XML-hul
- NLNZ extraction tool
    - nz.govt.natlib.adapter.flac.FlacAdapter
    - nz.govt.natlib.adapter.bmp.BitmapAdapter
    - nz.govt.natlib.adapter.mp3.MP3Adapter
    - nz.govt.natlib.adapter.arc.ArcAdapter
    - nz.govt.natlib.adapter.wav.WaveAdapter
    - nz.govt.natlib.adapter.pdf.PDFAdapter
    - nz.govt.natlib.adapter.jpg.JpgAdapter
    - nz.govt.natlib.adapter.openoffice.OpenOfficeAdapter
    - nz.govt.natlib.adapter.pdfbox.PDFBoxAdapter
    - nz.govt.natlib.adapter.any.DefaultAdapter
    - nz.govt.natlib.adapter.works.DocAdapter
    - nz.govt.natlib.adapter.excel.ExcelAdapter
    - nz.govt.natlib.adapter.gif.GIFAdapter
    - nz.govbt.natlib.adapter.html.HTMLAdapter
    - nz.govt.natlib.adapter.powerpoint.PowerPointAdapter
    - nz.govt.natlib.adapter.tiff.TIFFAdapter
    - nz.govt.natlib.adapter.word.WordAdapter
    - nz.govt.natlib.adapter.wordperfect.WPAdapter
    - nz.govt.natlib.adapter.xml.XMLAdapter3
    - nz.govt.natlib.adapter.xml.XMLAdapter

Risk Extractor

The Risk analysis is one of the tasks running as part of the VS (Validation Stack) for every file uploaded to Rosetta. The Risk analysis task uses the Risk Extractor plug-in for that purpose. The association of a certain risk to a certain Risk Extractor is done in the global format library.

Plug-in Parameters

Depending on the specific implementation, a plug-in may or may not require parameters. If the plug-in does require parameters, they are populated on the Risk Identifier Parameters page in the Global format library.

Usage

A list of the implemented Risk Extractor plug-ins is available on the Risk General Details page of the Global format library.

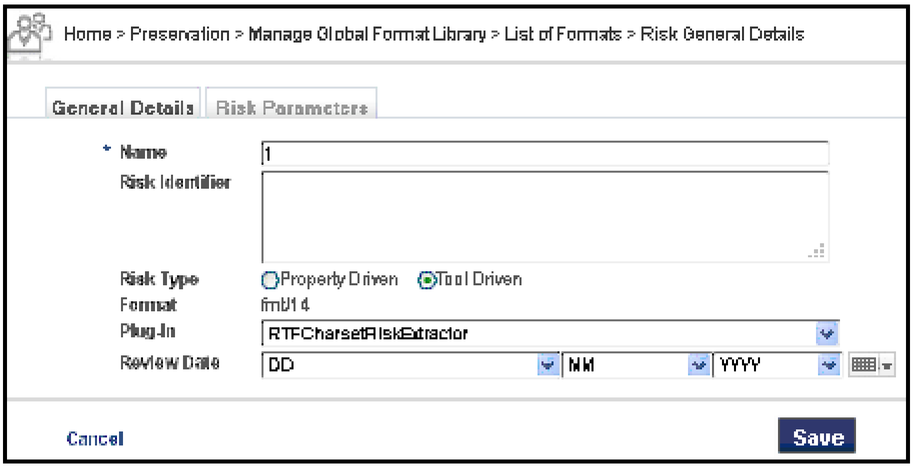


Figure 100: Risk Extractor Details

Implementations

Rosetta includes two implementations of the Risk Extractor plug-in:

- RTFCharsetRiskExtractor – A JAVA plug-in being able to identify a rotten bit in a RTF file's header
- RTFControlwordRiskExtractor – An additional JAVA plug-in being able to identify the same rotten bit in a RTF file's header

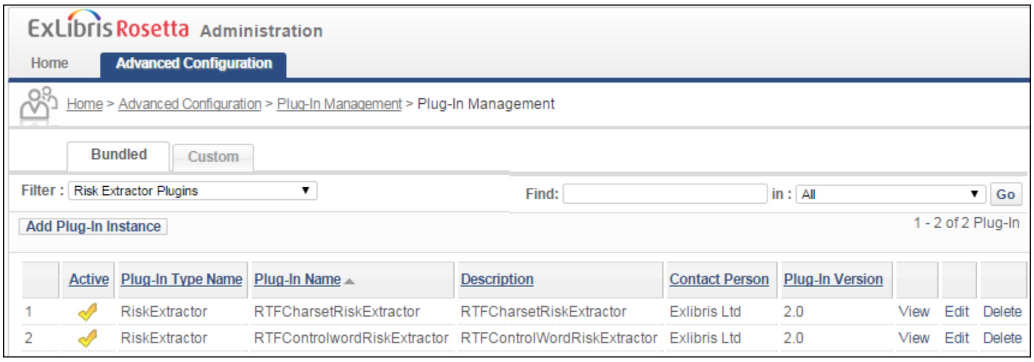


Figure 101: Risk Extractor Plug-in Management

Migration Tool

The Migration Tool represents the plug-in family of all classes or programs that handle a transformation or correction of a stream. The transformation can output a new file from the same format or from one format to another one (e.g., TIFF to J2K).

Plug-in parameters

Depending on the specific implementation, some of the plug-ins may require parameters and some not. If the plug-in does require parameters, those will be populated on step 2 of the Add Alternative wizard (preservation plan).

Usage

A list of the implemented Migration Tool plug-ins are available on step 1 of the Add Alternative wizard (preservation plan).

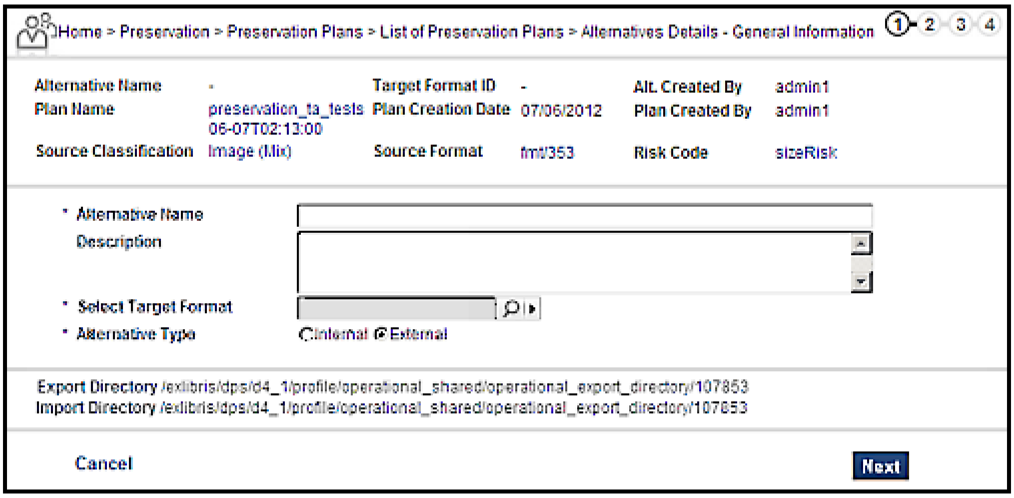


Figure 102: Add Alternative Wizard - Step 1

Implementations

Rosetta includes four implementations of the Media Converter plug-in:

- MP3toWaveMigrationTool – A script plug-in to convert MP3 files to WAV
- RtfMigrationTool - A script plug-in to correct the rotten bit in RTF files
- tiff_2_jp2_lzw_compression - A script plug-in to convert TIFF files to JP2 (JPEG2000)
- tiff_2_tiff_lzw_compression - A script plug-in to convert TIFF files to TIFF

Repository Task

The Repository Task plug-in is used to edit a DC or a DNX element for objects in the permanent repository. Whenever a massive update of such elements is required, an implementation of the Repository Task plug-in is automatically converted by the system to a Rosetta task. The task is called by the process automation framework to schedule a process that performs the required update across all relevant IEs.

To delete a repository task, disassociate it from any task chains and delete its plug-in from the plug-in interface.

Plug-in Parameters

Plug-in parameters are set while installing a new instance of the plug-in. The specific parameters available are determined on what is available in the plug-in. The following parameters are available for all plug-ins:

- Task Name
- Task Description

Usage

A list of the implemented Repository Task plug-ins will be available as tasks in the Task Chain edit page.

Implementations

Rosetta includes a single implementation of the Repository Task plug-in:

- DCReplacePlugin – A JAVA plug-in to update DC tags

Field Validator

The Field Validator plug-in is used to validate descriptive metadata according to the metadata profile setup. It uses regular expression syntax to define the pattern to be validated.

Plug-in Parameters

Plug-in parameters are set while installing a new instance of the plug-in and include the following:

- Regular Expression – Mandatory free text parameter to type the regular expression pattern to be validated

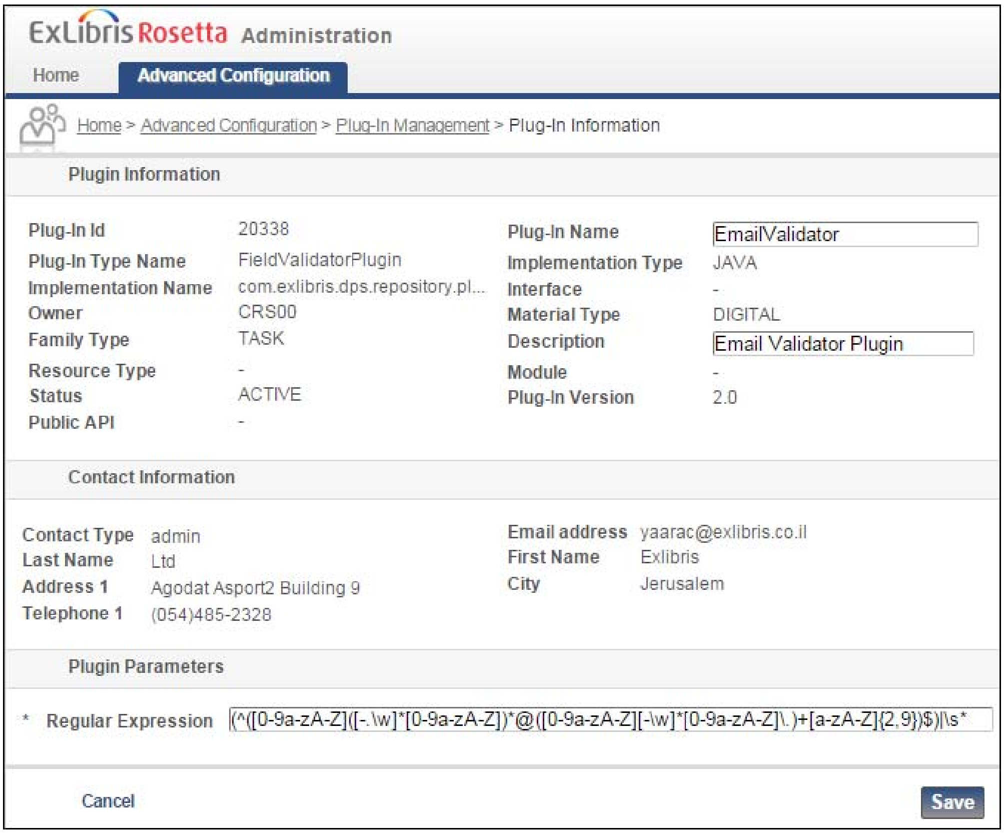


Figure 103: Field Validator Plug-in Details

Usage

A list of the implemented Field Validator plug-ins will be available as validation routines in the Metadata Form and Metadata Profile – DC Element Editor pages.

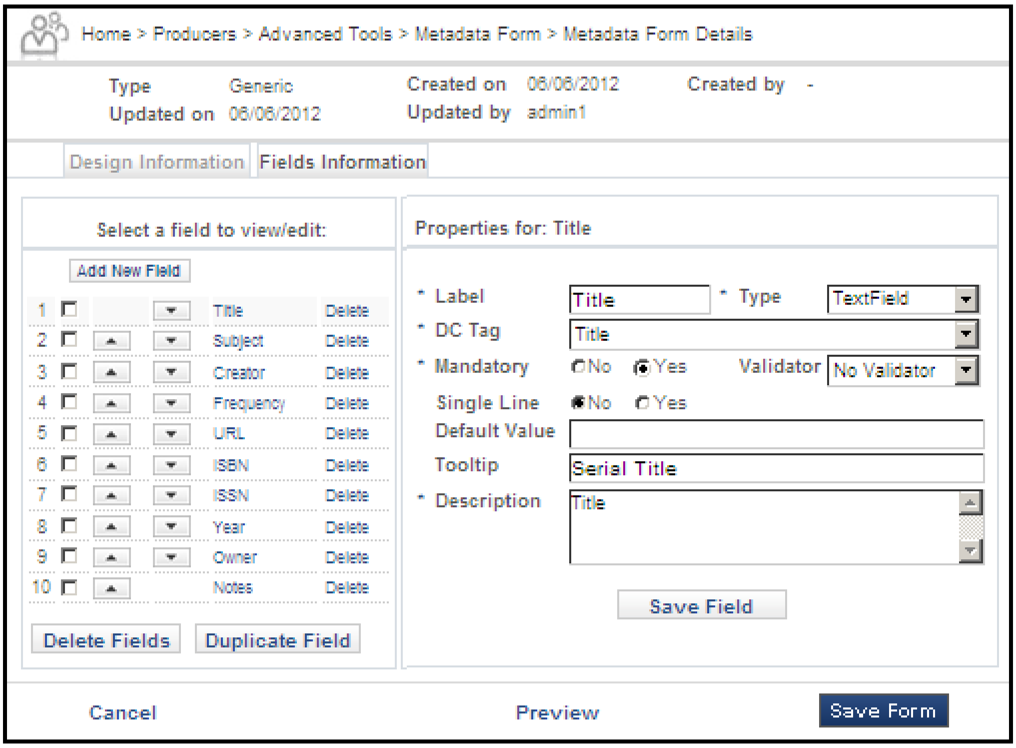
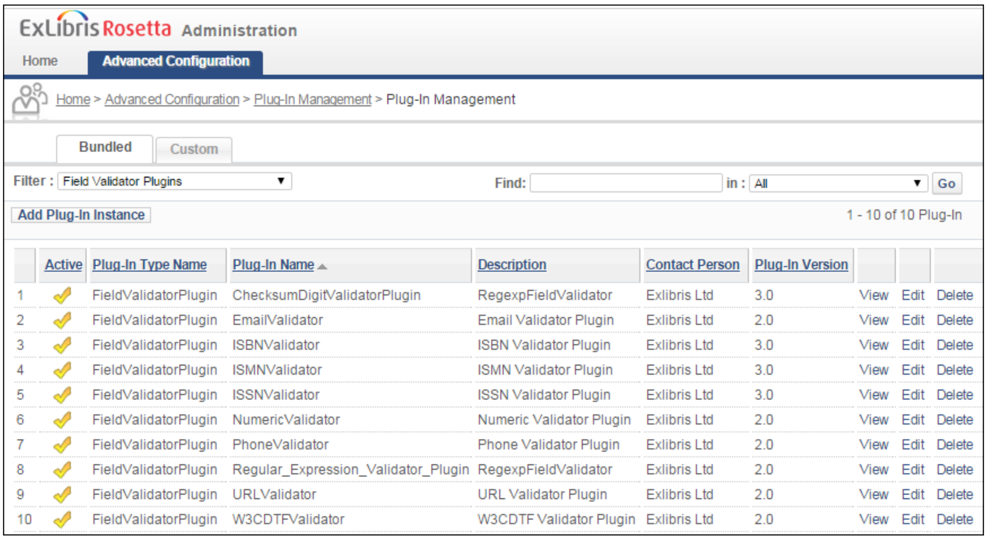


Figure 104: Metadata Form Details Page

Implementations

Rosetta includes the following implementations of the Field Validator plug-in:

- EmailValidator – Regular expression to validate email template
- ISBNValidator – Regular expression to validate ISBN template
- ISMNValidator – Regular expression to validate ISMN template
- ISSNValidator – Regular expression to validate ISSN template
- NumericValidator – Regular expression to validate numeric values
- PhoneValidator – Regular expression to validate phone template
- Regular_Expression_Validator_Plugin – A generic regular expression plug-in
- URLValidator – Regular expression to validate URL template
- W3CDTFValidator – Regular expression to validate W3CDTF (W3C Date and Time Format) template



	Active	Plug-In Type Name	Plug-In Name	Description	Contact Person	Plug-In Version			
1		FieldValidatorPlugin	ChecksumDigitValidatorPlugin	RegexpFieldValidator	Exlibris Ltd	3.0	View	Edit	Delete
2		FieldValidatorPlugin	EmailValidator	Email Validator Plugin	Exlibris Ltd	2.0	View	Edit	Delete
3		FieldValidatorPlugin	ISBNValidator	ISBN Validator Plugin	Exlibris Ltd	3.0	View	Edit	Delete
4		FieldValidatorPlugin	ISMNValidator	ISMN Validator Plugin	Exlibris Ltd	3.0	View	Edit	Delete
5		FieldValidatorPlugin	ISSNValidator	ISSN Validator Plugin	Exlibris Ltd	3.0	View	Edit	Delete
6		FieldValidatorPlugin	NumericValidator	Numeric Validator Plugin	Exlibris Ltd	2.0	View	Edit	Delete
7		FieldValidatorPlugin	PhoneValidator	Phone Validator Plugin	Exlibris Ltd	2.0	View	Edit	Delete
8		FieldValidatorPlugin	Regular_Expression_Validator_Plugin	RegexpFieldValidator	Exlibris Ltd	2.0	View	Edit	Delete
9		FieldValidatorPlugin	URLValidator	URL Validator Plugin	Exlibris Ltd	2.0	View	Edit	Delete
10		FieldValidatorPlugin	W3CDTFValidator	W3CDTF Validator Plugin	Exlibris Ltd	2.0	View	Edit	Delete

Figure 105: Field Validator Plug-in List

The Field Validator plug-in can be used to validate descriptive metadata according to the relevant metadata profile setup. It uses regular expression syntax to define the pattern to be validated.

There is currently one out-of-the-box implementation, `RegexpFieldValidatorPlugin`, for the Field Validator plug-in. `RegexpFieldValidatorPlugin` receives `regEx` as a parameter and uses it to validate a field during runtime.

This implementation enables customers to create different plug-in instances using custom regular expressions, without having to write plug-in implementations themselves.

Persistent Identifier Generator Plugin

The PI Generator Plugin allows you to use a customized tool for generating persistent identifiers to be used with a Handle server.

Plug-in Parameters

The parameters for the PI Generator Plugin are set while installing a new instance of the plug-in and include the following:

- Task Level – IE, Representation, or File
- Sequence – a series of numbers. (See **Configuring Sequences** on page **110**).
- Object Identifier Type – the type of object identifier for the PI

- Check for Duplicates – select if you want Rosetta to skip identifiers that already exist
- Overwrite on Existing – select if you want Rosetta to overwrite existing duplicates

Usage

PI Generator plugins create unique identifiers for a digital objects such as an image or an article. PIDs enable accessing this object as long as the object exists, even if it was moved to another location. PIDs work with Rosetta to enable persistent identification of an object across contexts.

Implementation

Rosetta includes the following implementations of the Persistent Identifier plug-in:

- Handle Generator – Used for creating handle persistent identifiers
- URN Generator – Used for setting the prefix for a URN ID created in Rosetta

Persistent Identifier (PI) Generator (Deprecated)

The Persistent Identifier plug-in allows you to use a customized tool for generating persistent identifiers.

Plug-in Parameters

Depending on the specific implementation, a plug-in may or may not require parameters. If the plug-in does require parameters, they are populated during installation of a new instance of the plug-in.

Usage

A list of the implemented Persistent Identifier plug-ins is available on the Persistent Identifier Task Parameters page.

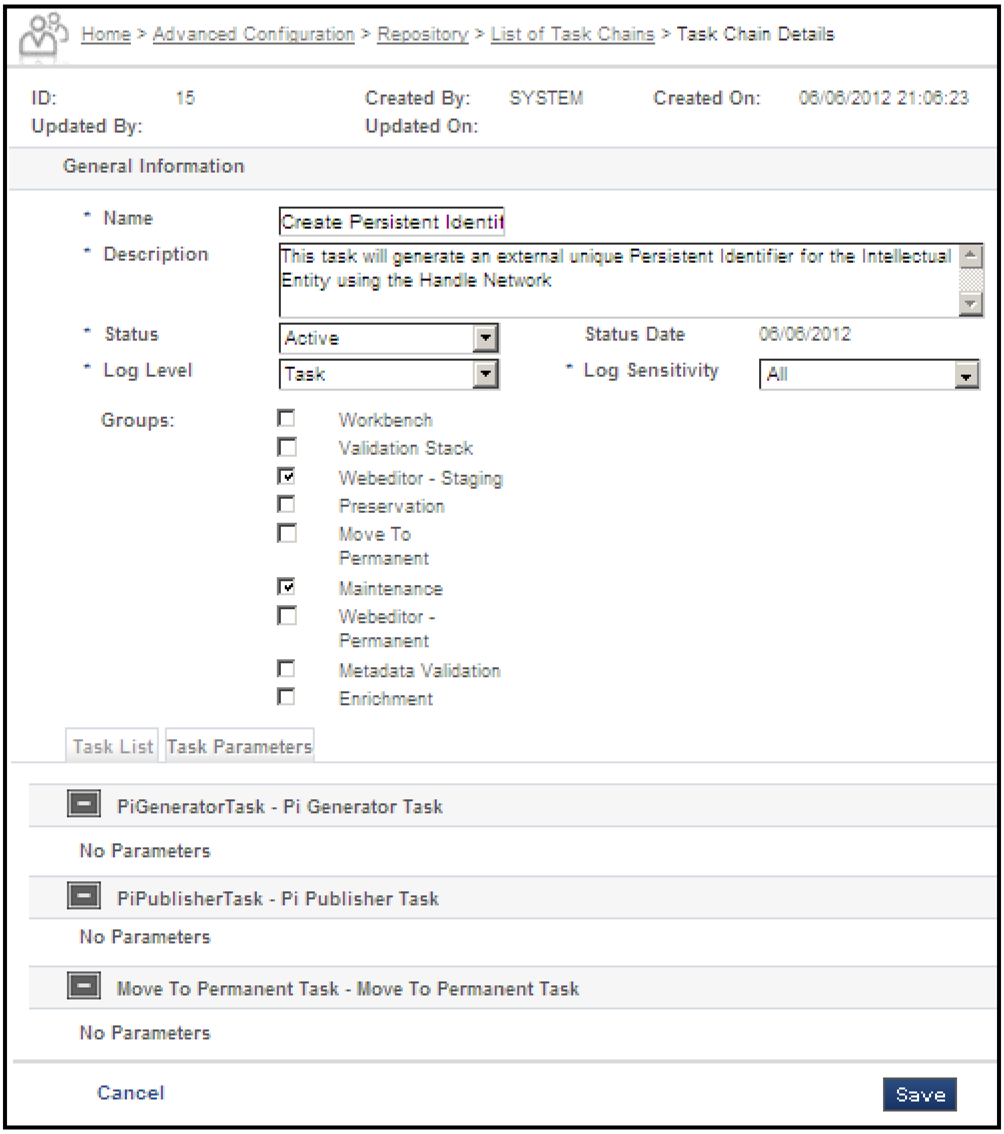


Figure 106: Persistent Identifier Plug-in Parameters

Implementations

Rosetta includes the following implementations of the Persistent Identifier plug-in:

- CMS Generator – Used for setting the prefix for a CMS ID created in Rosetta
- URN Generator – Used for setting the prefix for a URN ID created in Rosetta

Converter (Publishing)

A converter plug-in converts a published Rosetta IE to a certain format or schemathat is part of the Publishing configuration.

Plug-in Parameters

Depending on the specific implementation, a plug-in may or may not require parameters. If the plug-in does require parameters, they are populated during installation of a new instance of the plug-in.

Usage

A list of the implemented Converter plug-ins is available as a converter type in the Add Publishing Profile wizard, step 1.

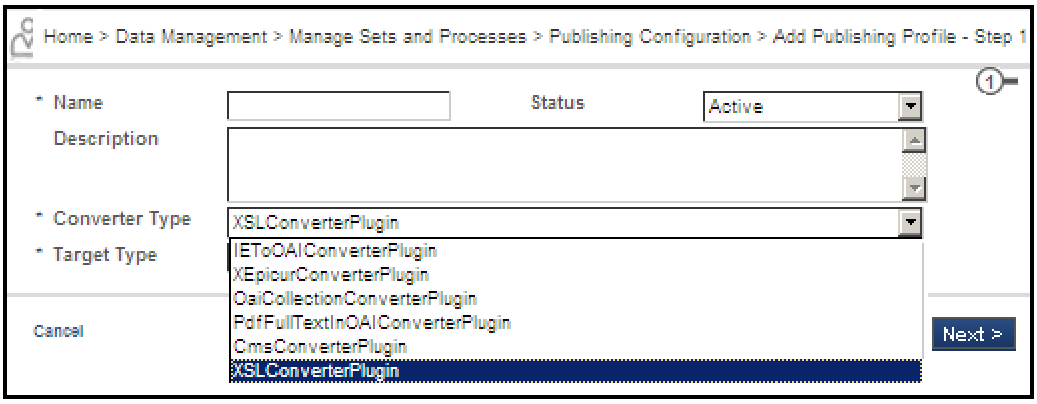


Figure 107: Converter Types in Publishing Profile

Implementations

Rosetta includes the following implementations of the Converter plug-in:

- IEToOAI-converter – Converts the descriptive metadata from the Rosetta METS and transforms it to the OAI_DC metadata format
- XSL-converter – Converts the descriptive metadata from the Rosetta METS and transforms it to an XML format, as configured using an XSLT file (input parameter).
- Handle Converter – Prepares the output for the Handle publishing file

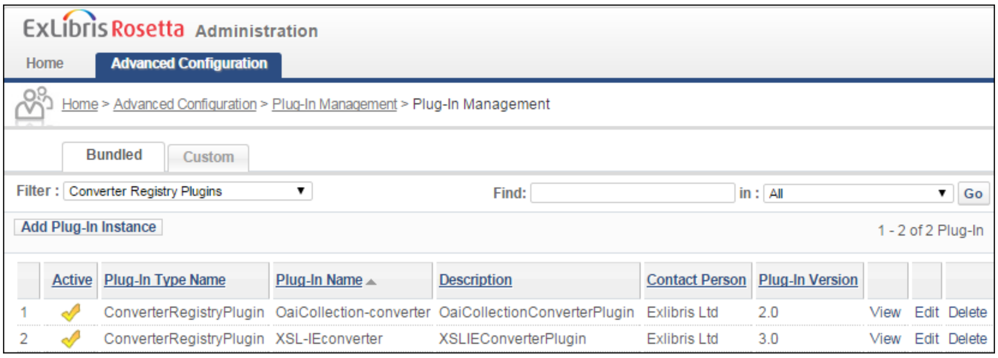


Figure 108: Converter Registry Plug-in List

Publisher (Publishing)

The Publisher plug-in is used to set the physical location that stores the published IEs (part of the Publishing configuration).

Plug-in Parameters

Depending on the specific implementation, a plug-in may or may not require parameters. If the plug-in does require parameters, they are populated during installation of a new instance of the plug-in.

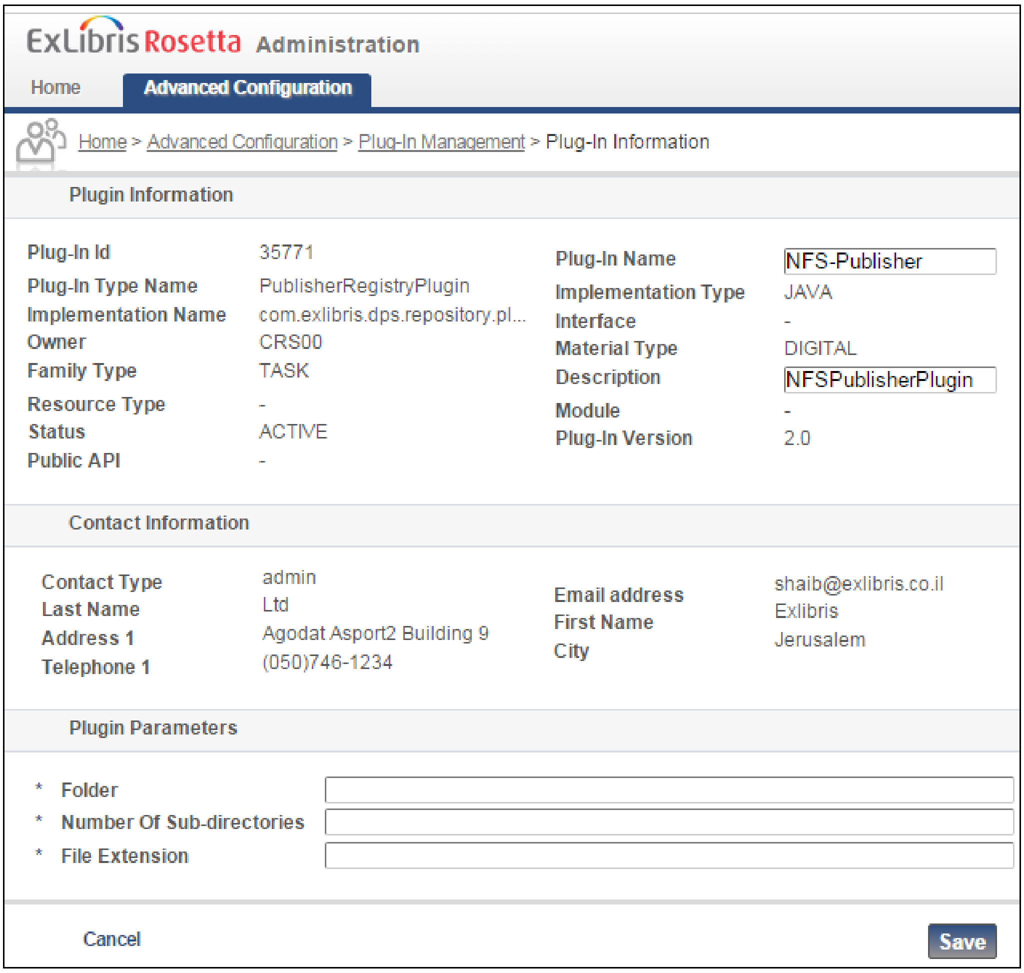


Figure 109: Publisher Registry Plug-in Details

Usage

A list of the implemented Publisher plug-ins will be available as Target type in the Add Publishing Profile wizard, step 1.

Implementations

Rosetta includes the following implementations of the Publisher plug-in:

- NFS-Publisher – Used exclusively to publish IEs to Google
- OAI-Publisher – Target is the OAI-PMH database tables
- Handle Publisher – prepares the handle data for publishing

Start-up Check

The start-up check plugin is used to check essential components needed for running Rosetta properly. Please refer to the *Rosetta System Administration Guide* for further details.

Plug-in Parameters

Depending on the specific implementation, a plug-in may or may not require parameters. If the plug-in does require parameters, they are populated during installation of a new instance of the plug-in.

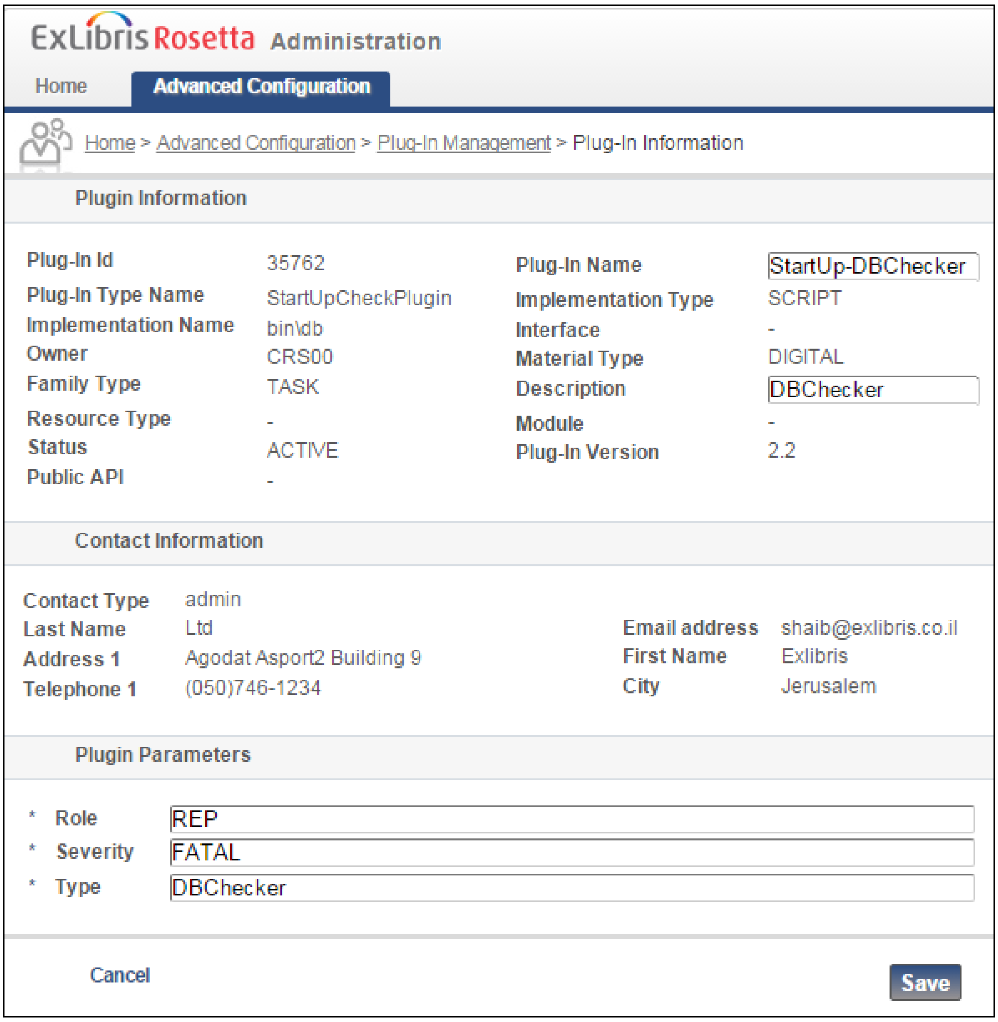


Figure 110: Plug-in Management, Start-up Checker

Usage

All start-up check plug-in instances are activated by Rosetta during system startup. Any errors detected by any of the start-up check plug-in instances are displayed to the user during login.

Implementations

Rosetta includes the following implementations of the start-up check plug-in:

- DBChecker
- DeliveryWSChecker
- DepositWSChecker
- PDSCheckPlugin
- PermanentWSChecker
- PluginsCheckerPlugin
- RepositoryWSChecker
- SharedFoldersAccessChecker
- SharedFoldersSpaceChecker
- StorageAccessChecker
- StorageSpaceChecker

Access Rights

The Access Rights plug-in tool allows access rights checks to be performed outside of Rosetta. On checking the access rights, the plug-in returns a true or false value that controls whether an object can be viewed.

Plug-in Parameters

Depending on the specific implementation, a plug-in may or may not require parameters. If the plug-in does require parameters, they are populated during installation of a new instance of the plug-in.

Usage

TheAccess Rights plug-in is available as input criteria on the access rights configuration page.

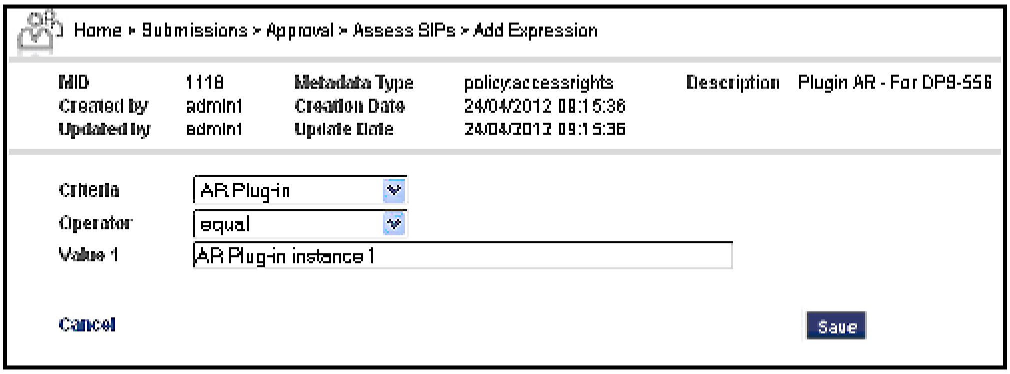


Figure 111: Access Rights Plug-in Configuration

The plug-in relies on two properties:

1 Token – This should be concatenated to the delivery URL (created by the external system accessing Rosetta) and will be used by the plug-in.

Example:

```
http://rosetta.exlibrisgroup.com:1801/delivery/
DeliveryManagerServlet?dps_pid=IE17978/delivery/
DeliveryManagerServlet?dps_pid=IE17978&token=<token>
```

2 IP - The IP address is derived from the General Parameter `client_ip_header` (similar to any other IP-based access right functionality).

Implementations

There are no implementations for the Access Rights plug-in.

Custom Fixity

The Custom Fixity plug-in allows customers to run a fixity check in addition to the three fixity algorithms used by Rosetta (MD5, CRC32 and SHA-256).

Plug-in Parameters

Depending on the specific implementation, a plug-in may or may not require parameters. If the plug-in does require parameters, they are populated during installation of a new instance of the plug-in.

Usage

A list of the implemented Custom Fixity plug-ins is available as a drop-down list in the Custom Fixity task.

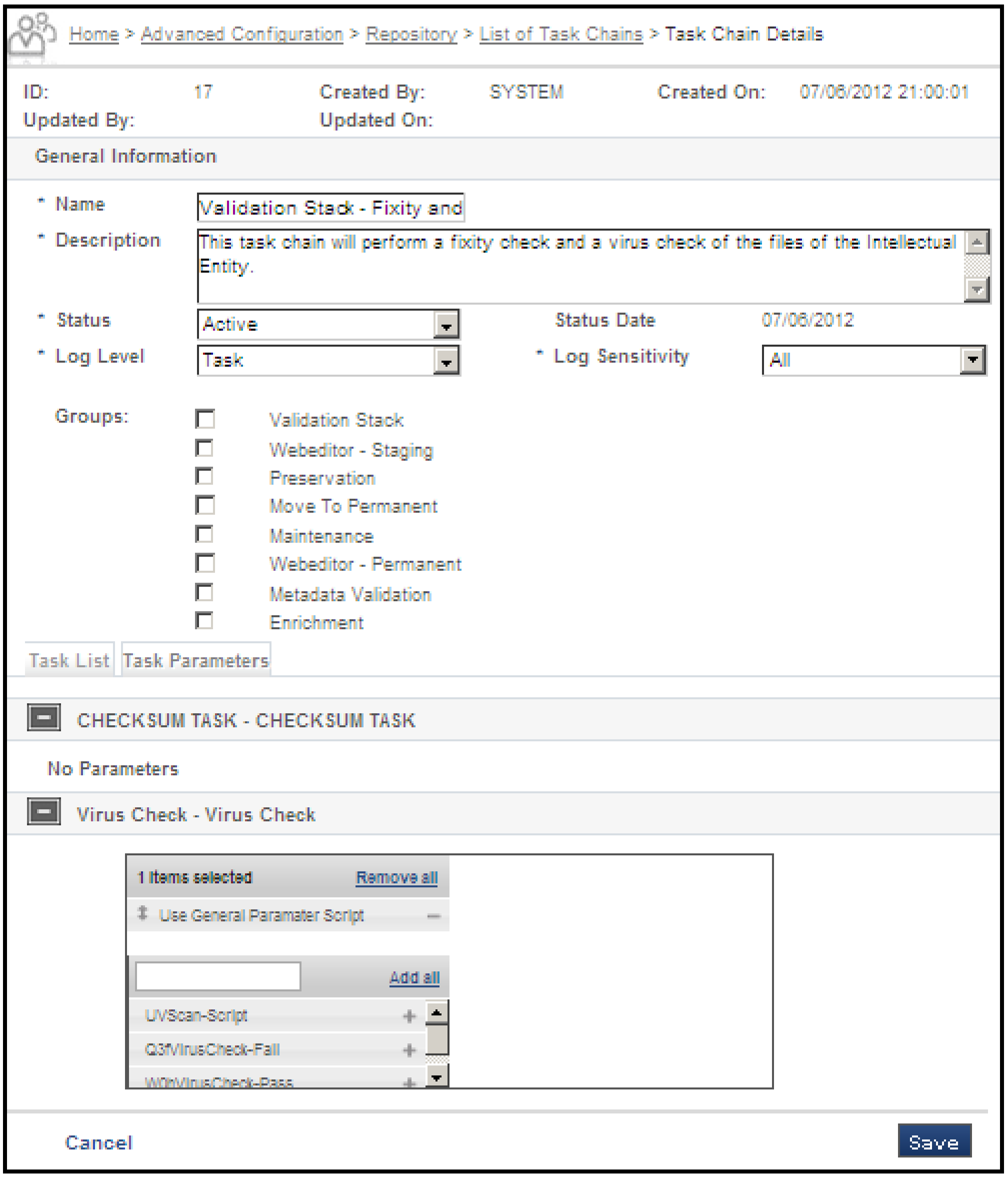


Figure 112: Fixity Task Chain Details Page

Implementations

There are no implementations of the Access Rights plug-in.

Format Identifier

The Format Identifier plug-in is used in order to allow customers to use a customized tool for identifying the format of the deposited file.

Plug-in Parameters

Depending on the specific implementation, a plug-in may or may not require parameters. If the plug-in does require parameters, they are populated during installation of a new instance of the plug-in.

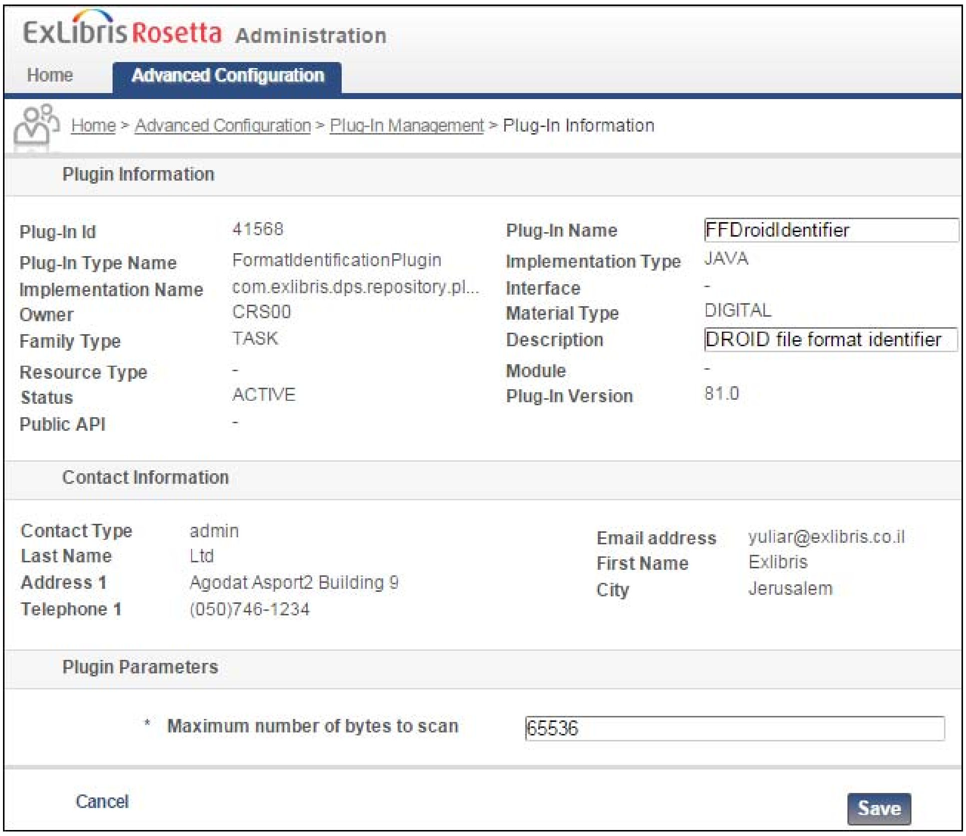


Figure 113: Format Identifier Plug-in Information Page

Usage

A list of the implemented Format Identifier plug-ins is available on the Format Identification Task Parameters page.

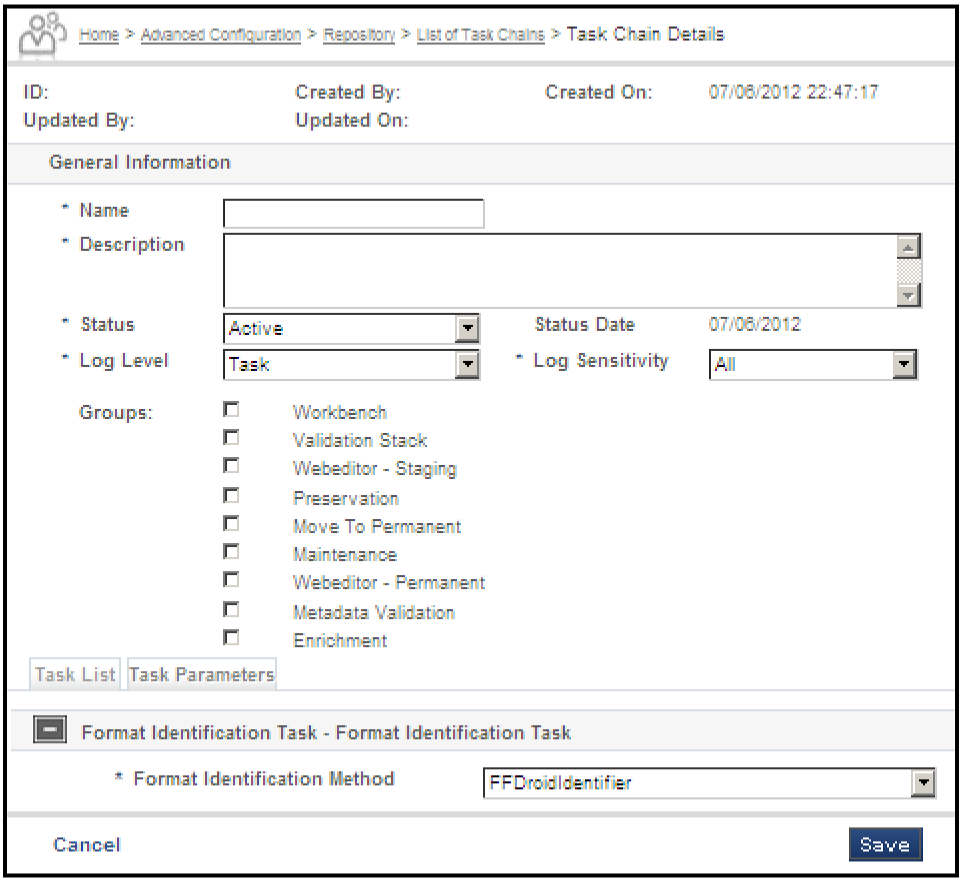


Figure 114: Task Chain for Format Identifier Plug-in

A list of the implemented Format Identifier plug-ins is also available on the Format Auto Correction Rules page (see figure below).

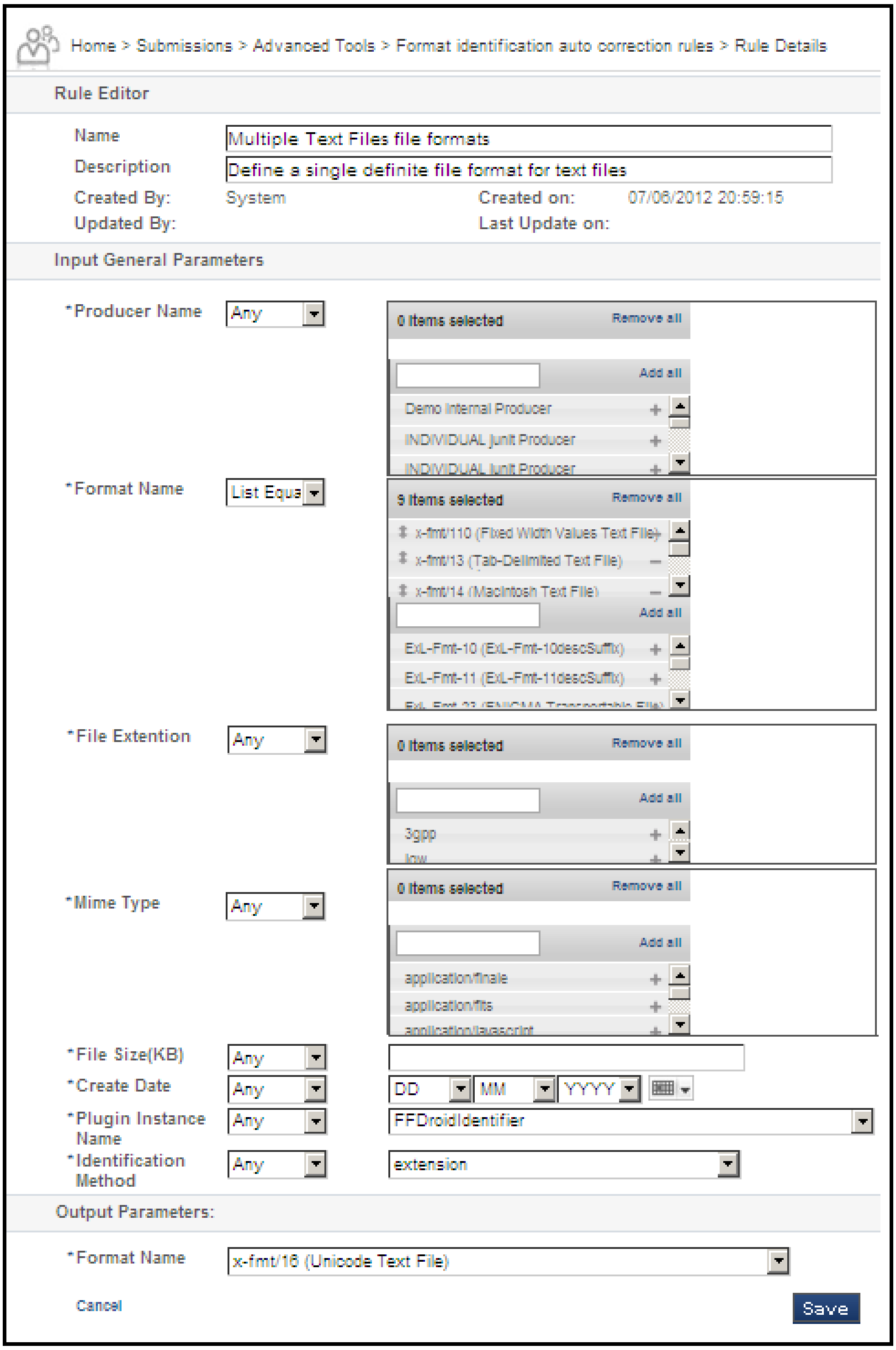


Figure 115: Format Identification Auto-Correction Rules - Details

Implementations

Rosetta includes an implementation of DROID 6.0 as a Format Identifier plug-in.

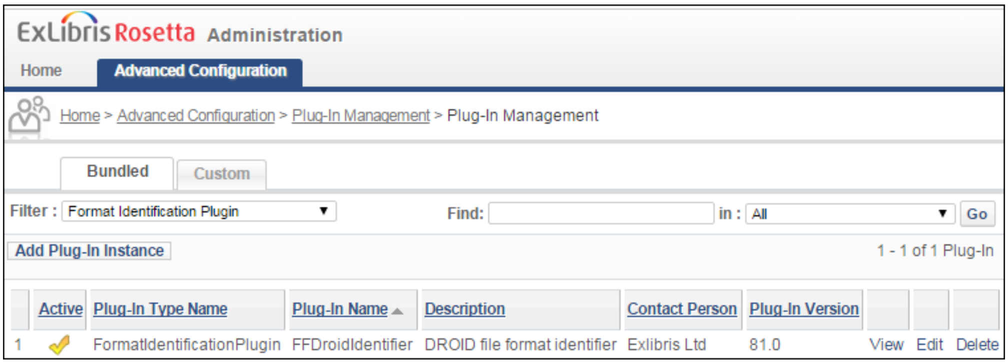


Figure 116: Identification Plug-in Management

Virus Check

The Virus Check plug-in allows customers to use several customized virus check tools.

Plug-in Parameters

Depending on the specific implementation, a plug-in may or may not require parameters. If the plug-in does require parameters, they are populated during installation of a new instance of the plug-in.

Usage

A list of the implemented Virus Check plug-ins is available on the Virus Check Task Parameters page.

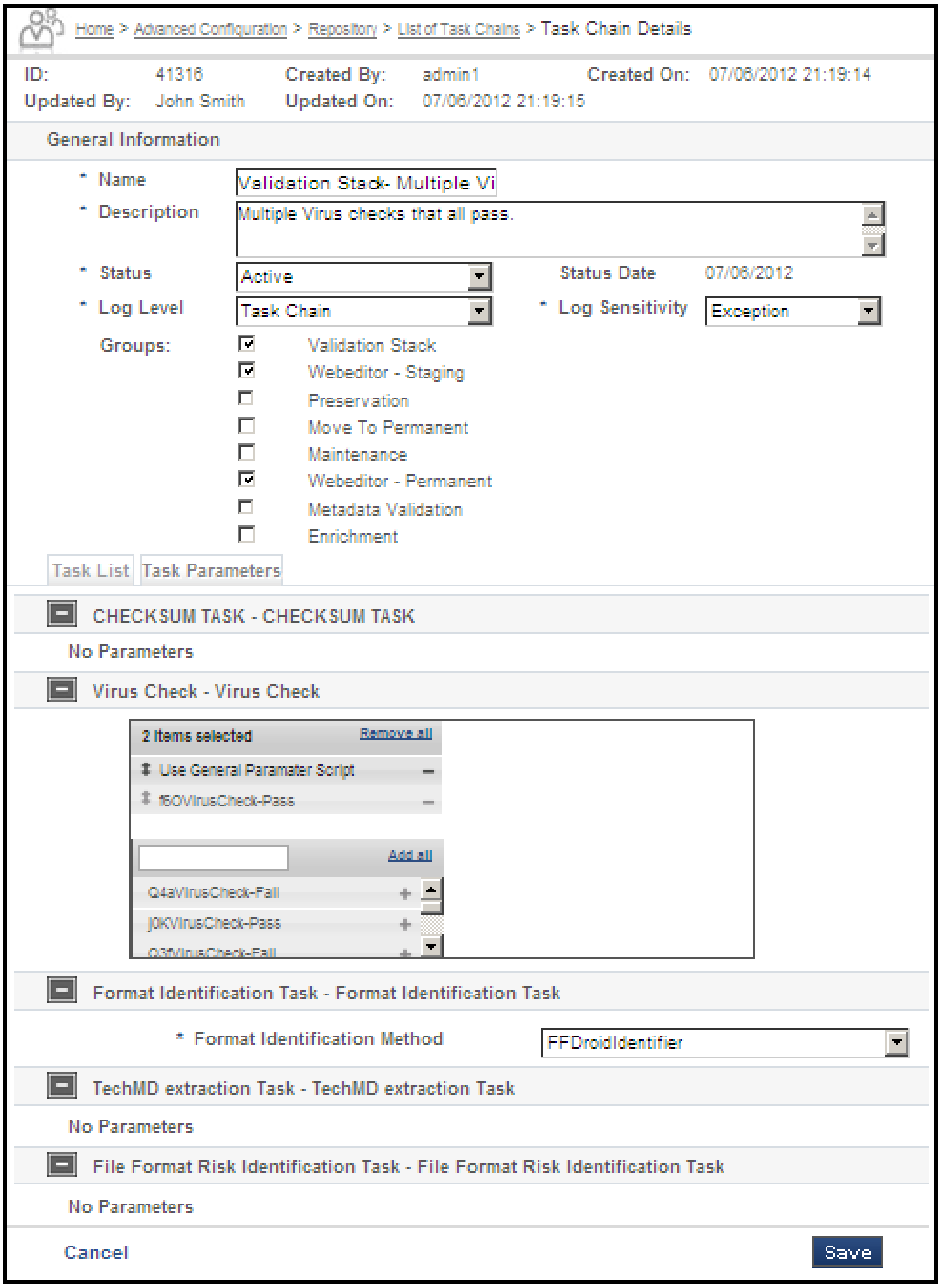


Figure 117: Virus Check Task Chain Details

Implementations

Rosetta includes the following implementations of the Virus Check plug-in:

- Use General Parameter Script – Rosetta will keep supporting the virus check script that is currently stored as a general parameter named uvscan (for backwards compatability purposes).
- Uvscan script – A dummy implementation of a virus check script plug-in

NOTE:
This is a placeholder only. Install and configure any anti-virus software separately.

Viewer Pre-Processor Plug-in

A viewer pre-processor plug-in can be used in order to restructure an intellectual entity or convert a file prior to delivery to meet the requirements of a given viewer.

Plug-in Parameters

Depending on the specific implementation, a plug-in may or may not require parameters. If the plug-in does require parameters, they are populated in the installation of a new instance of the plug-in.

Usage

A viewer pre-processor plug-in can be used in order to restructure an intellectual entity or convert a file prior to delivery to meet the requirements of a given viewer. The list of available viewer pre-processor plug-ins is available directly from the viewer management UI.

Storage Plug-in

Storage plug-ins provide the necessary interface between Rosetta and a storage layer, allowing Rosetta to store files on (and retrieve files from) various file systems and storage solutions.

Plug-in Parameters

Depending on the specific implementation, a plug-in may or may not require parameters. If the plug-in does require parameters, they are populated in the storage configuration.

Usage

Storage plug-ins provide the necessary interface between Rosetta and a storage layer, allowing Rosetta to store files on (and retrieve files from) various file systems and storage solutions. The list of available storage plug-ins is displayed in the storage management UI.

File Comparison Plug-in

File comparison plug-ins receive two files and return a value that can be used as part of a preservation evaluation.

Plug-in Parameters

Depending on the specific implementation, a plug-in may or may not require parameters. If the plug-in does require parameters, they are populated in the installation of a new instance of the plug-in.

Usage

The plug-in receives two files (original and migrated) and returns a decimal value that can be used as part of a preservation evaluation. On failure it returns `-1`.

11

Digital Object Identifiers

This section includes:

Integrating Digital Object Identifiers

Rosetta supports the storing, generating, and publishing of Digital Object Identifiers (DOIs) in IEs. This allows external systems that store and resolve links to digital objects to store information about IEs in Rosetta.

Rosetta needs to be configured in order to integrate with the different systems that store the DOI values.

Configuring DOI Generation (Generic)

The configuration of the DOI generation task includes the following steps:

- Installing an instance of the CMSGenerator plug-in.
- Adding the PiGeneratorGenericTask to an enrichment task chain.
- Selecting the enrichment task chain that includes the DOI generation task as part of the SIP processing configuration setup.
- Configuring the SIP routing rules in order to match the SIP processing configuration with the material flows.
- Creating a task chain for generating the DOI as a stand-alone task chain, to be run as a process on IEs that are already in the permanent repository. This task chain should use the PiGeneratorGenericTask task, and its parameter

should also be the plug-in instance that was created before (e.g. DOIGenerator).

Creating an Instance of the CMSGenerator Plug-in

Use the Plug-in Manager UI to install an instance of the CMSGenerator plug-in. (The plug-in instance can be saved under a different name, such as DOIGenerator.)

NOTE:
If you are re-installing or updating the plug-in, you must activate it.

To install an instance of the CMSGenerator plug-in:

1 Click **Plug-In Management** on the Home > Advanced Configuration page.

The Plug-In Management page opens.

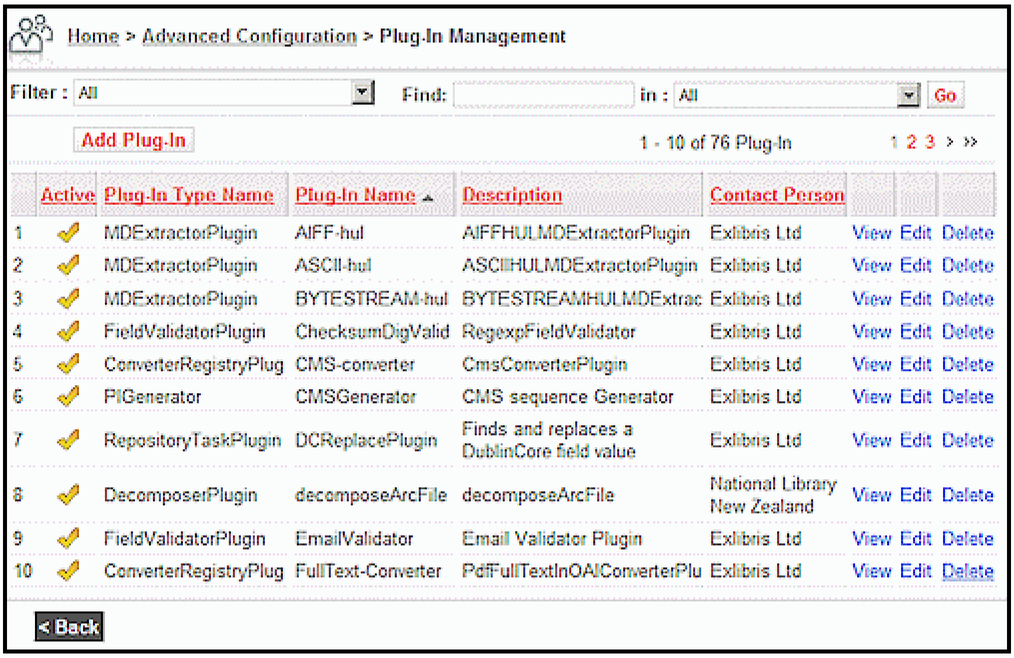


Figure 118: Plug-In Management Page

2 Click **Add Plug-In**.

The List of Plug-In page opens.

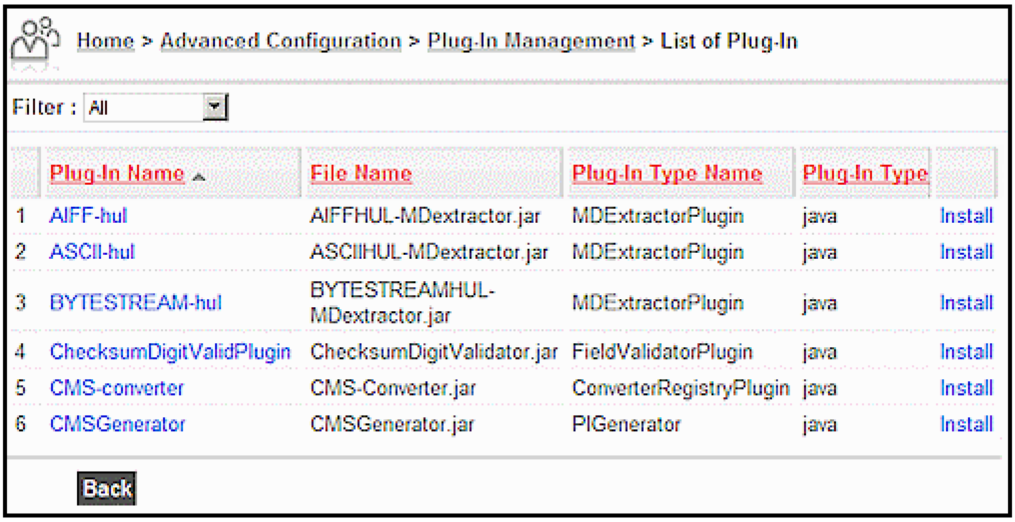


Figure 119: List of Plug-In Page

3. Click the **Install** link in the row that contains the CMSGenerator plug-in.

   The Plug-In Information page opens.

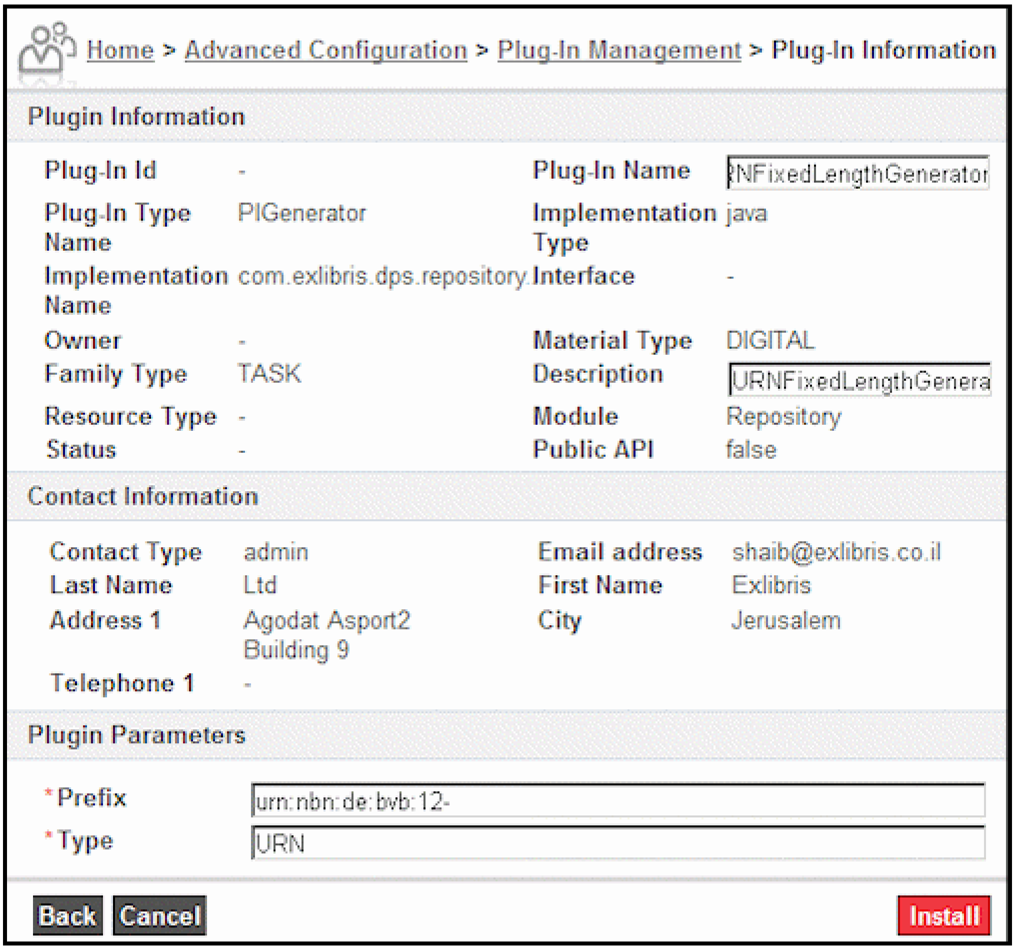


Figure 120: Plug-In Information Page

4 In the Plugin Information section, type a unique name and description for the plug-in instance.

5 In the Plugin Parameters section, enter the following fields:

- **Prefix** – Enter the prefix for the DOI. For example, the IDs that are generated by this plug-in will be named **urn:nbn:de:bvb:12-*01234556*,** where the digits after the prefix are a generated database sequence.
- **Type** – Enter the DOI type (such as **URN**).

6 Click **Install** to create the plug-in instance.

The Plug-In Management page opens.

7 In the list of plug-ins, click the check mark in the row that contains the new plug-in to activate the plug-in.

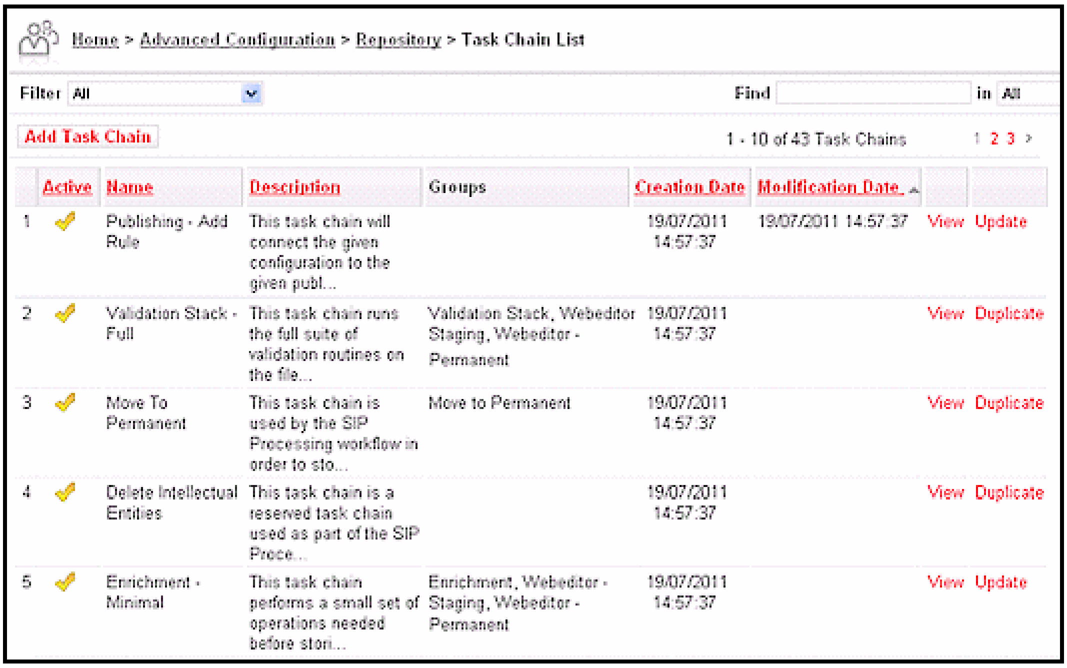
Adding the PiGeneratorGenericTask Task to an Enrichment Task Chain

This step adds a **PiGeneratorGenericTask** task to an enrichment task chain.

To add a task to the Enrichment task chain:

1 Click **List of Task Chains** on the Home > Advanced Configuration > Repository page.

The Task Chain List page opens.


Home > Advanced Configuration > Repository > Task Chain List

Filter All Find in All

Add Task Chain 1 - 10 of 43 Task Chains 1 2 3 >

	Active	Name	Description	Groups	Creation Date	Modification Date		
1		Publishing - Add Rule	This task chain will connect the given configuration to the given publ...		19/07/2011 14:57:37	19/07/2011 14:57:37	View	Update
2		Validation Stack - Full	This task chain runs the full suite of validation routines on the file...	Validation Stack, Webeditor Staging, Webeditor - Permanent	19/07/2011 14:57:37		View	Duplicate
3		Move To Permanent	This task chain is used by the SIP Processing workflow in order to sto...	Move to Permanent	19/07/2011 14:57:37		View	Duplicate
4		Delete Intellectual Entities	This task chain is a reserved task chain used as part of the SIP Proce...		19/07/2011 14:57:37		View	Duplicate
5		Enrichment - Minimal	This task chain performs a small set of operations needed before stori...	Enrichment, Webeditor - Staging, Webeditor - Permanent	19/07/2011 14:57:37		View	Update

Figure 121: Task Chain List Page

2 Click the **Update** link in the row containing the Enrichment task chain.

The Task Chain Details page opens.

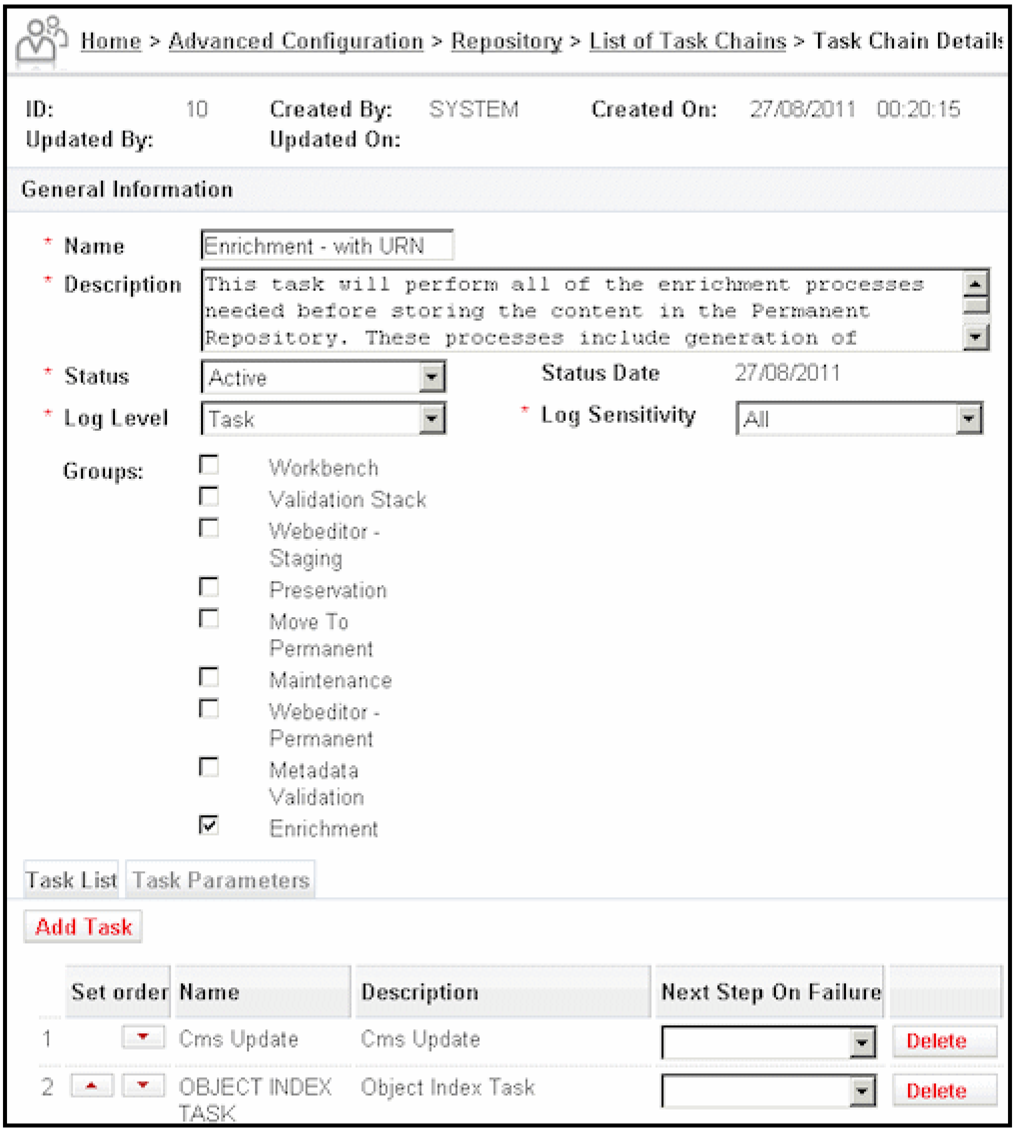


Figure 122: Task Chain Details Page

3 Click the **Add Task** button.

The Task List page opens.

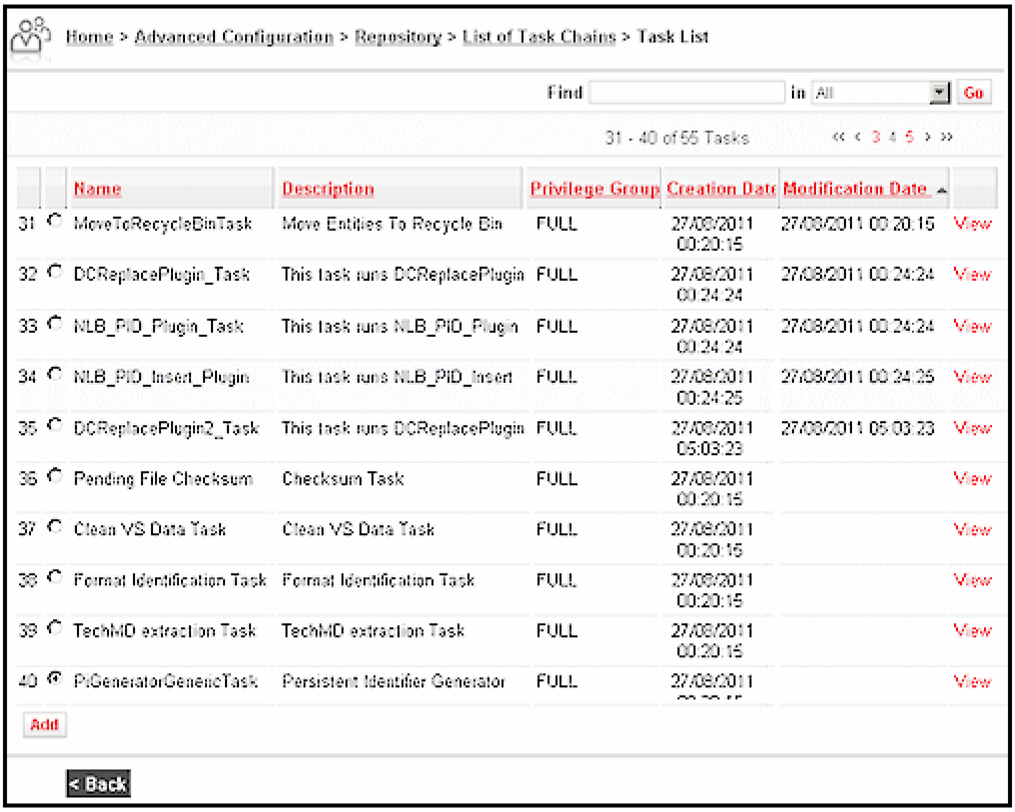


Figure 123: Task List Page

4 Select the **PiGeneratorGenericTask** task.

5 Click the **Add** button.

The PiGeneratorGenericTask task displays in the task list on Task Chain Details page.

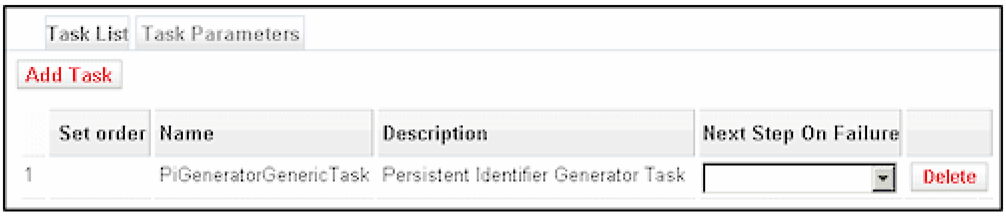


Figure 124: Task List - Task Chain Details Page

6 Select the **Task Parameters** tab.

The information on the Task Parameters tab opens.

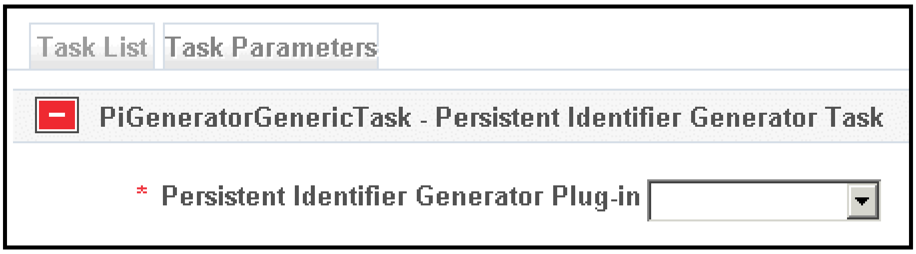


Figure 125: Task Parameters - Task Chain Details Page

7. In the drop-down list, select the instance of the plug-in you created previously.
8. Click the **Save** button.

Selecting the Enrichment Task Chain as Part of the SIP Processing Configuration

In order to use the enrichment task chain that includes the new DOI creation task, make sure it is used in the SIP processing configuration that is in use.

To select the Enrichment task chain:

1. Click **SIP Processing Configuration** on the Home > Submissions > Configure Settings page.

   The SIP Processing Configuration List page opens.

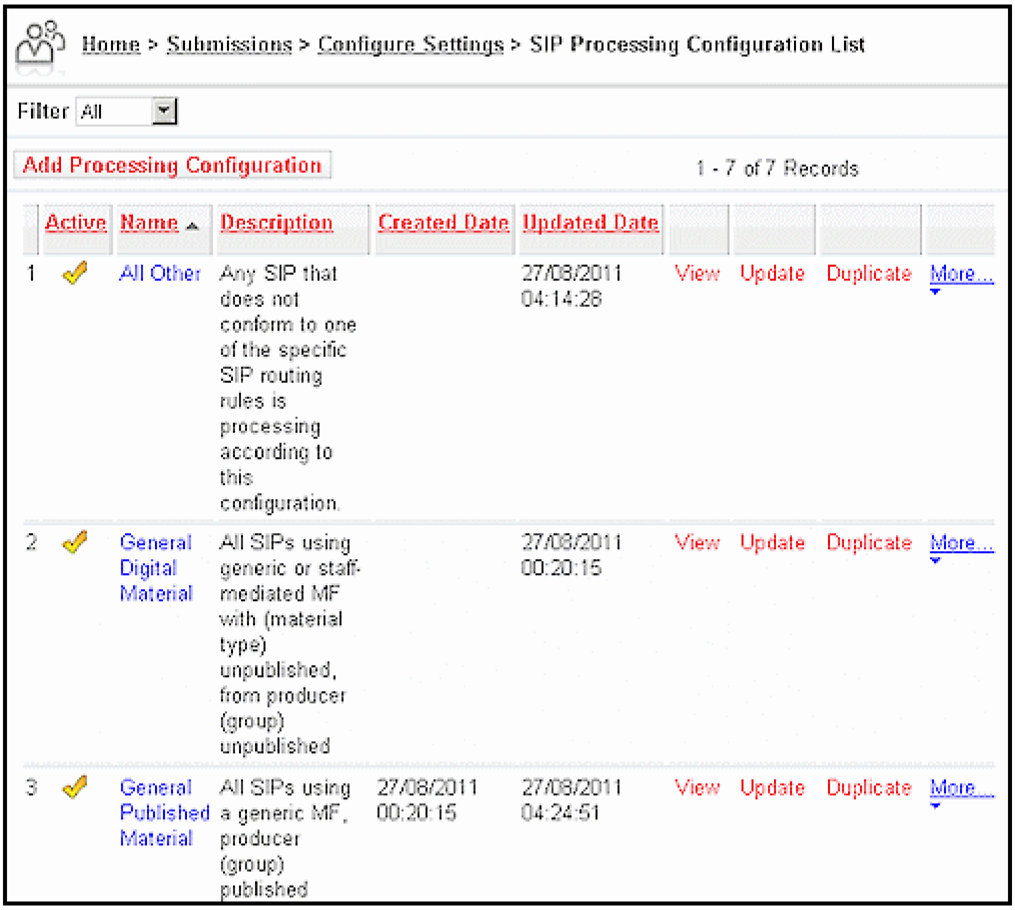


Figure 126: SIP Processing Configuration List Page

2 Click the **Update** link in the row containing the SIP processing configuration.

The SIP Processing Configuration page opens.

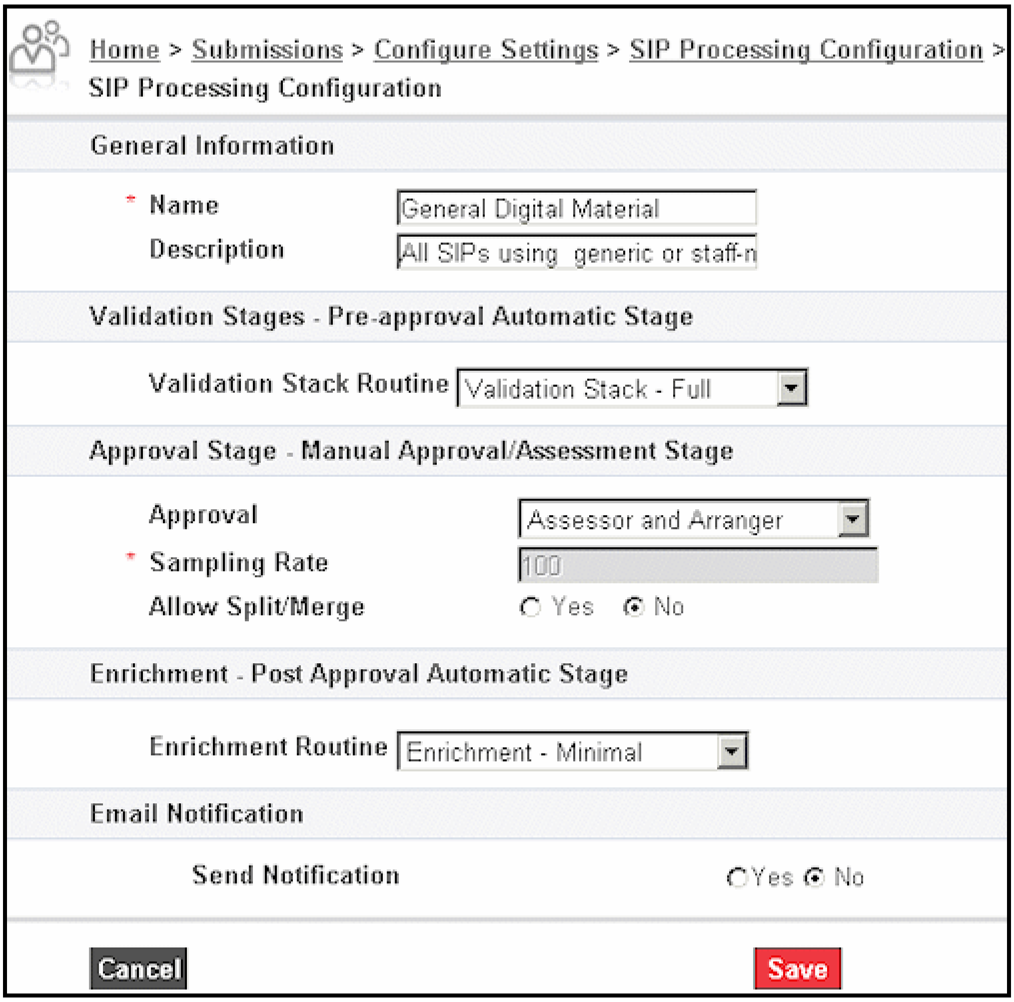


Figure 127: SIP Processing Configuration Page

3 In the **Enrichment Routine** drop-down list, select the enrichment routine that includes the PiGeneratorGenericTask task you added previously.

4 Click the **Save** button.

Setting the SIP Routing Rules

Make sure the SIP routing rules are using the right SIP processing configuration.

To set the SIP routing rules:

1 Click **SIP Routing Rules** on the Home > Submissions > Configure Settings page.

The SIP Routing Rule List page opens.

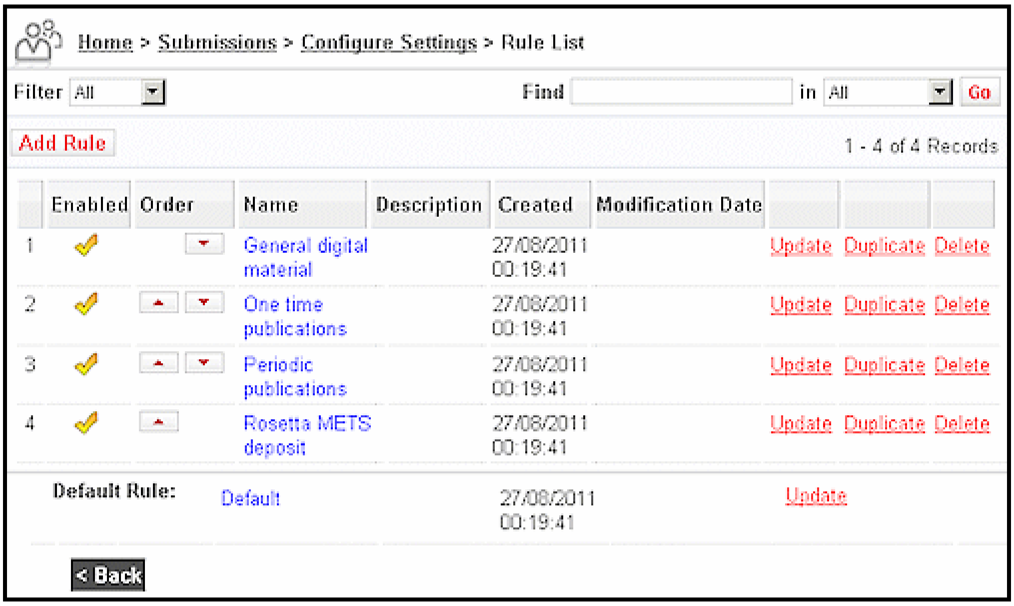


Figure 128: SIP Routing Rule List Page

2 Click the **Update** link in the row containing the SIP's routing rules.

The SIP Rule Details page opens.

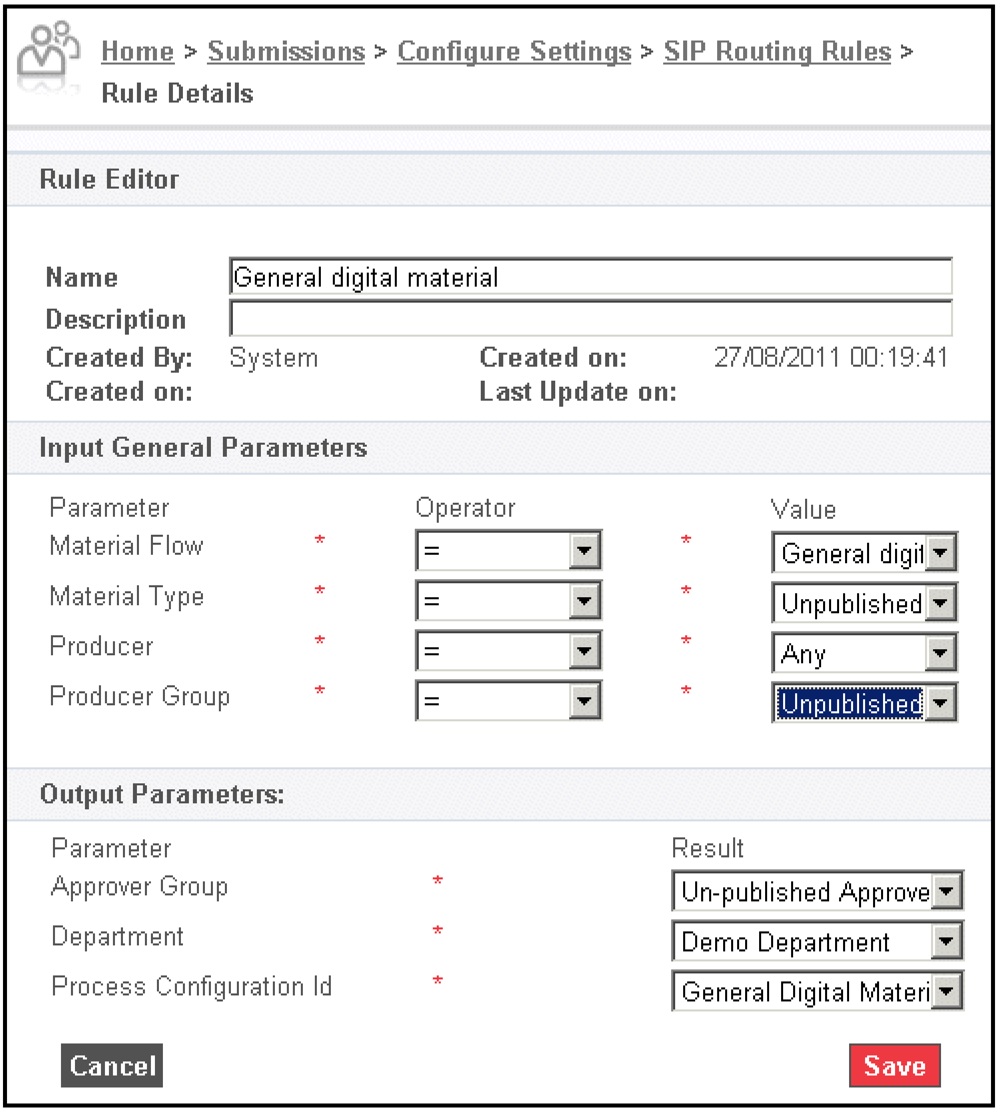


Figure 129: SIP Rule Details Page

3 Make sure the SIP routing rules are using the right SIP processing configuration.

4 Click the **Save** button.

DOI Creation as a Stand-Alone Task Chain

The DOI creation task can be added to a task chain that will be used in a process or a service on IEs that are already in the Permanent Repository.

To add a task to the Enrichment task chain:

1. Click **List of Task Chains** on the Home > Advanced Configuration > Repository page.

   The Task Chain List page opens.

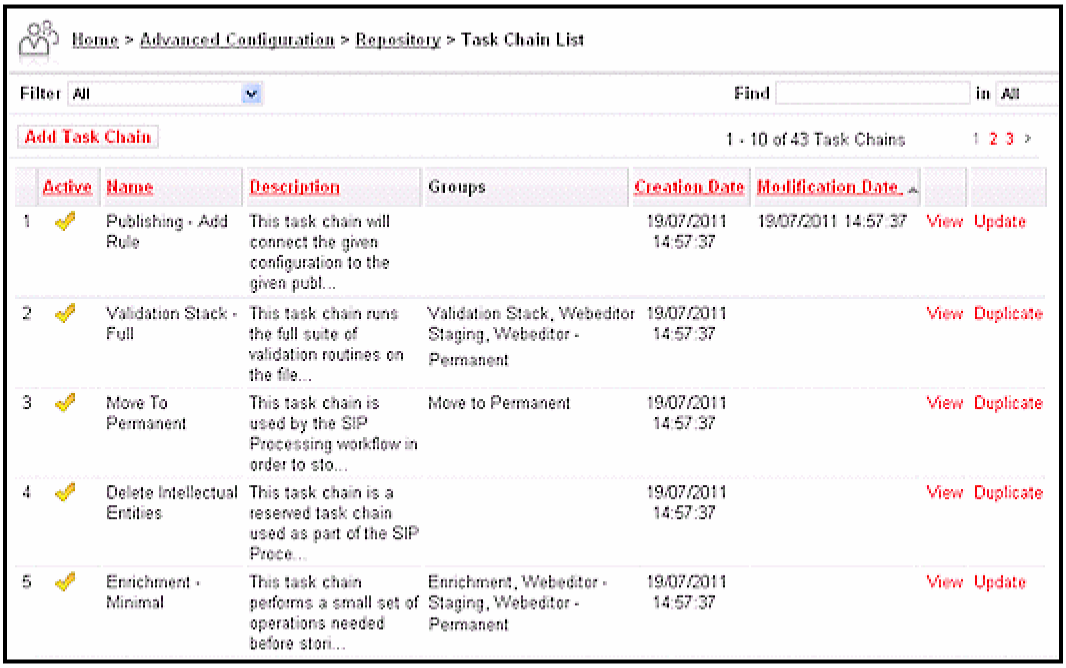


Figure 130: Task Chain List Page

2. Click the **Add Task Chain** button.

   The Task Chain Details page opens.

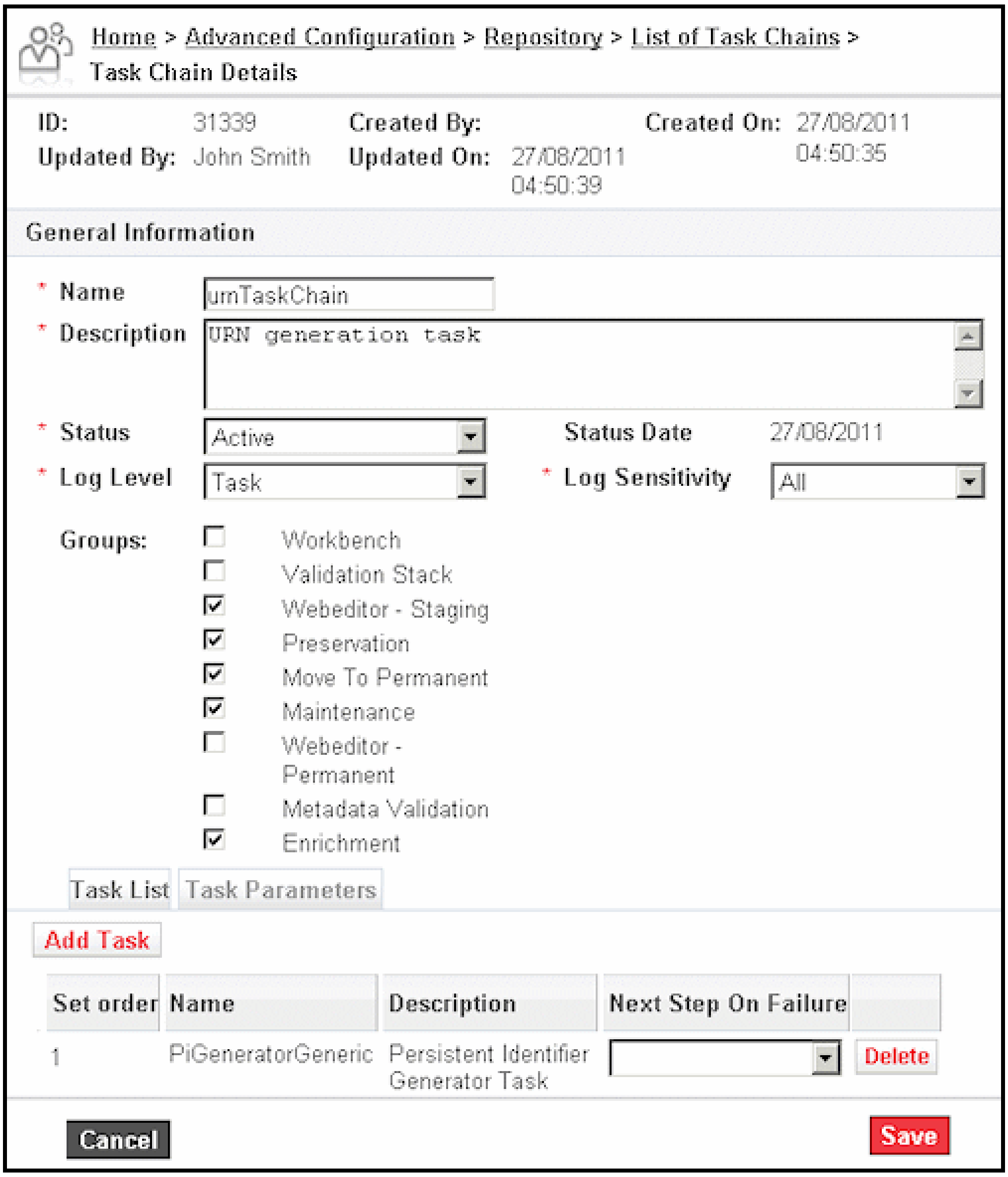


Figure 131: Task Chain Details Page

3 Click the **Add Task** button.

The Task List page opens.

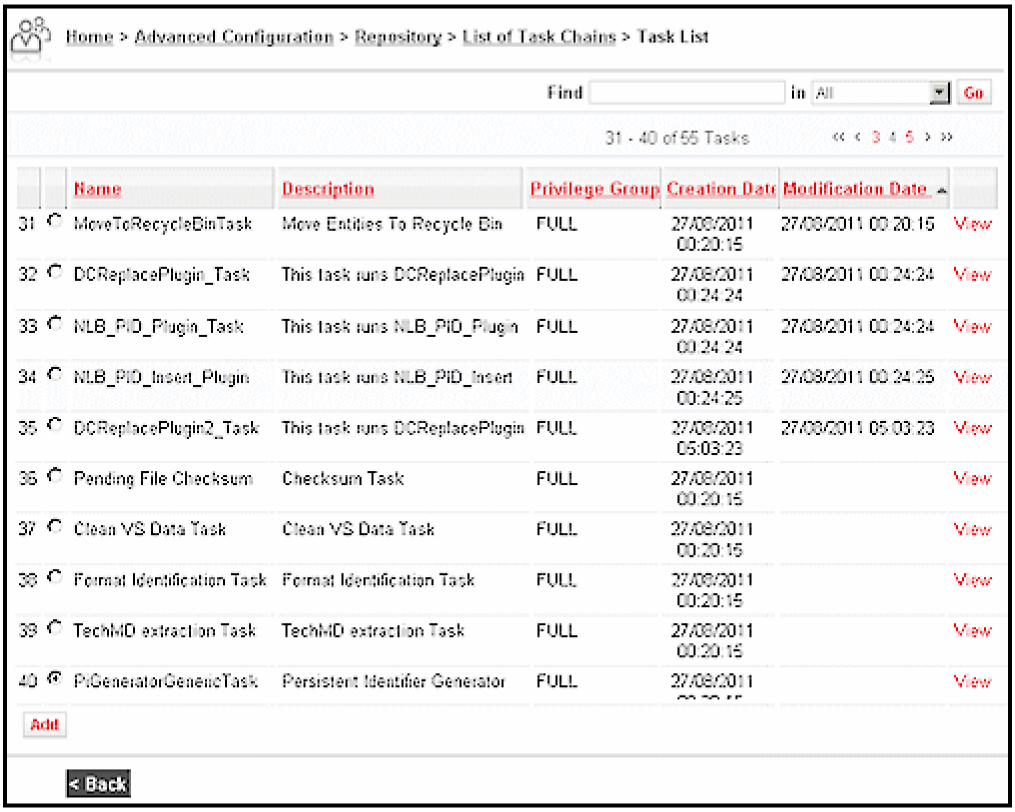


Figure 132: Task List Page

4 Select the **PiGeneratorGenericTask** task.

5 Click the **Add** button.

The PiGeneratorGenericTask task displays in the task list on Task Chain Details page.

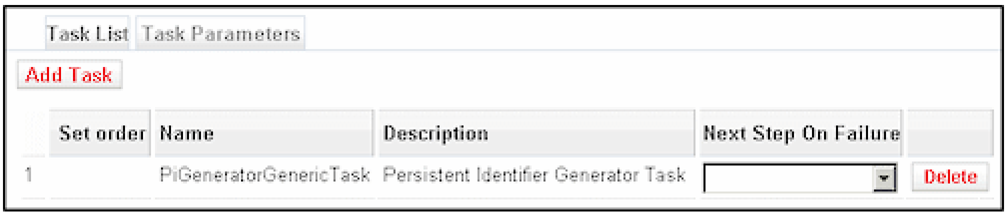


Figure 133: Task List - Task Chain Details Page

6 Select the **Task Parameters** tab.

The information on the Task Parameters tab opens.

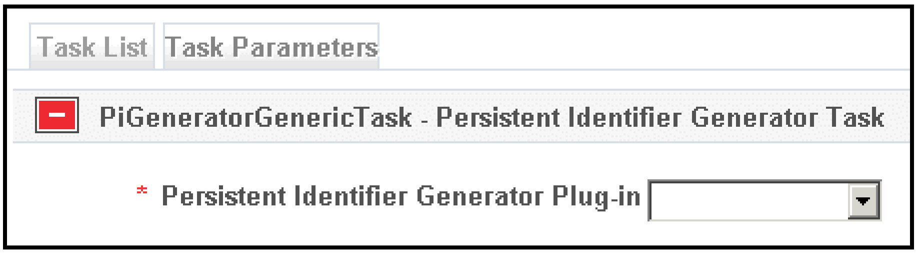


Figure 134: Task Parameters - Task Chain Details Page

7 In the drop-down list, select the instance of the plug-in you created previously.

8 Click the **Save** button.

Configuring Handle Creation and Publishing

The Handle DOI (which is used by NLNZ) is implemented in Rosetta with the following tasks:

- **PiGeneratorTask** – creates the Handle.
- **PiPublisherTask** – publishes the Handle.

To use these tasks as part of the Enrichment task chain or as a stand-alone task chain, make sure these tasks are included in the list of tasks for the task chain, either in the Enrichment task chain that is used by the SIP Processing Configuration and the SIP Routing Rule, or in the list of tasks of the stand-alone task chain.

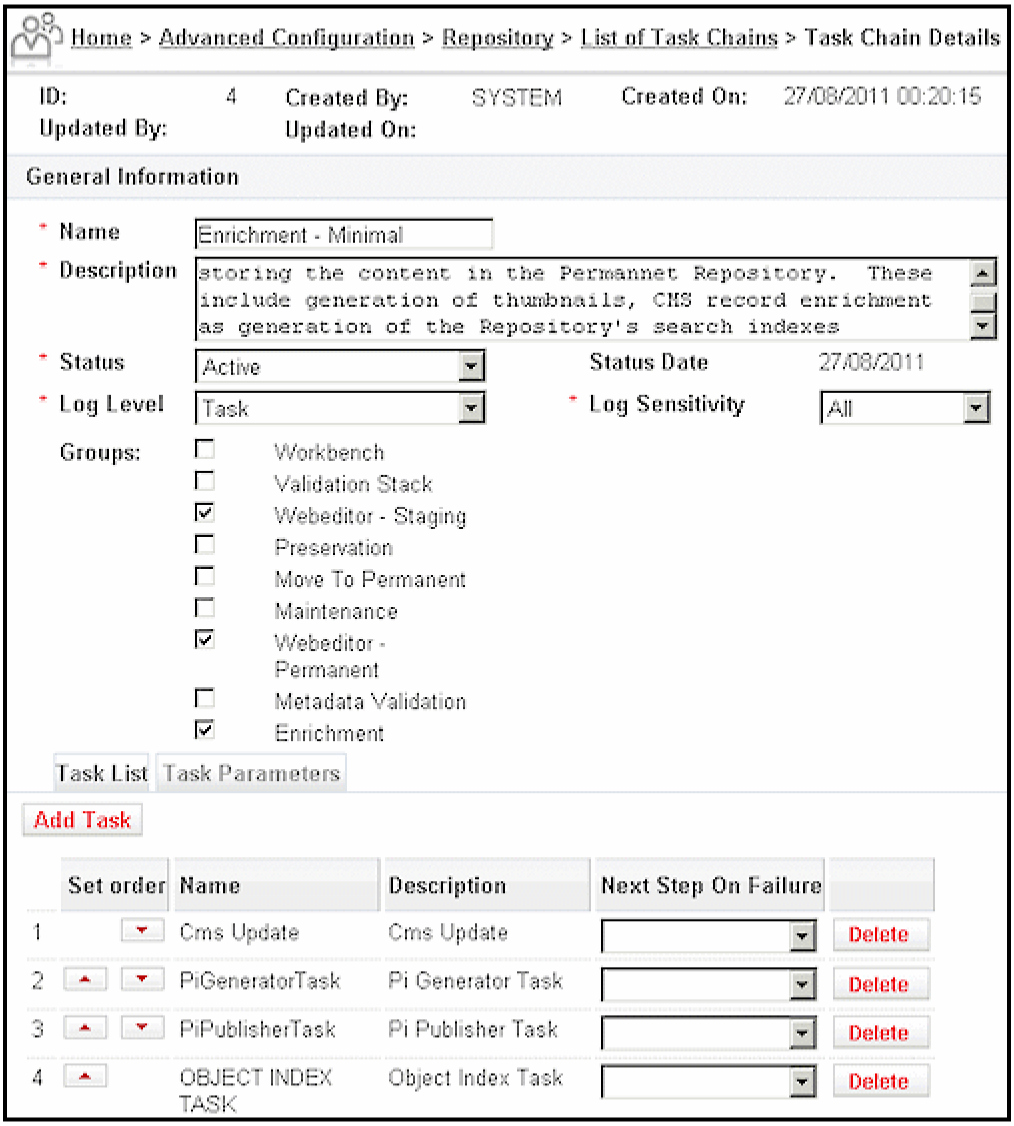


Figure 135: Task Chain Details Page

Configuring NLB PID Creation and Publishing

The NLB PID is a DOI (used by NLB) that is implemented in Rosetta using the NLB_PID_Plugin_Task task, which creates and publishes the DOI.

In order to use this task as part of the Enrichment task chain or as a stand-alone task chain, make sure that this task is included in the list of tasks for the task chain, either in the Enrichment task chain that is used by the SIP Processing Configuration and the SIP Routing Rule, or in the list of tasks of the stand-alone task chain.

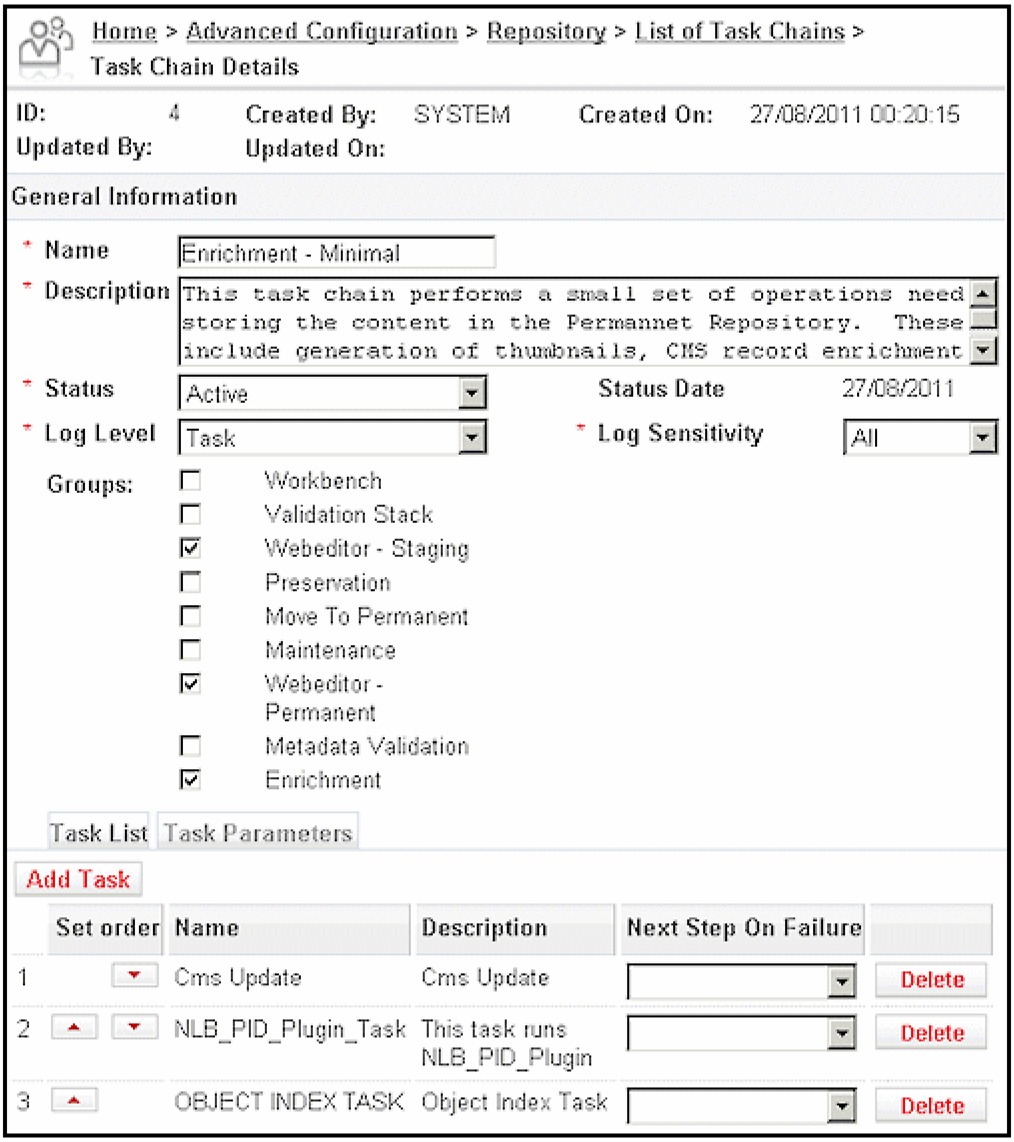


Figure 136: Task Chain Details Page

12

Localization

This section contains:

User Interface Languages

Rosetta uses an English (American) language default interface. Customers can change the interface language by adding a language to the User Language code table, then adding a translation for all interface objects (such as pages, labels, and values).

Users can add as many languages as they need to Rosetta, then choose among those they have entered.

Add a New Language

To access the code table for languages, follow this path: **Advanced Configuration > General > All Code Tables**. Click the text link **User Language** from the list of code tables.

The code table page opens to the User Language table (see figure below).

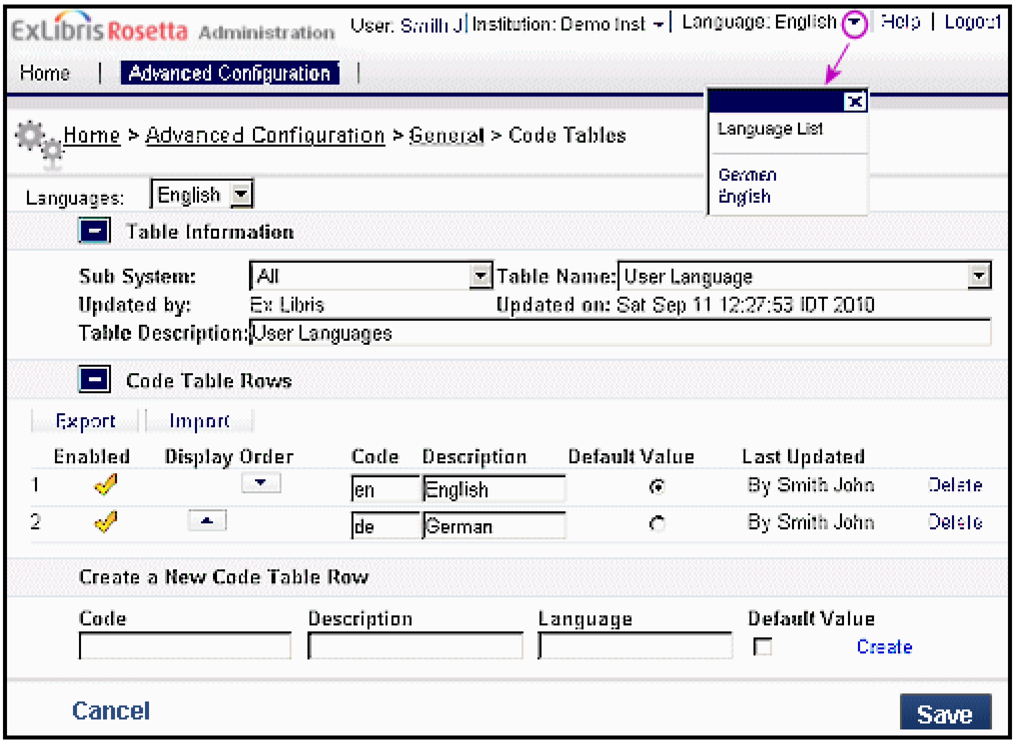


Figure 137: User Language Code Table

To add a new language, enter the language's code and description (for example, code = "fr" and description = "French") in the fields below the Create a New Code Table Row heading. Then click the **Create** text link.

The data you entered appears as the next row in the User Language code table.

Click the **Save** button.

The system saves the new language information and returns you to the List of Code Tables page.

Adding New Language Values to the Code Table

In order for the new language to appear on the UI, new values must be added to the code tables that store UI text. This can be done in one of two ways:

- Updating an .XLS File (Export/Import)
- Updating in the UI

For large code tables such as UILabels (over 6,000 rows), the XLS file method should be used to translate the language.

Updating an .XLS File (Export/Import)

The export/import method involves

- exporting the code table content into an `.xls` file (Excel spreadsheet or another spreadsheet application that reads `.xls` files)
- modifying the data in the spreadsheet application, and
- importing the spreadsheet back into Rosetta.

You can perform these manual translations one table at a time, from the Code Tables page, or you can export all code tables in a single export and into a single file.

To download the tables one by one, use the **Export** text link in the Code Table Rows section of the Code Tables page (see **Exporting All Code Tables**).

To download all code tables that require translating, follow the path **Home > Advanced Configuration > Multi-Language Setting > Export Code Tables**, then select your language and click the **Export** button (see figure below).

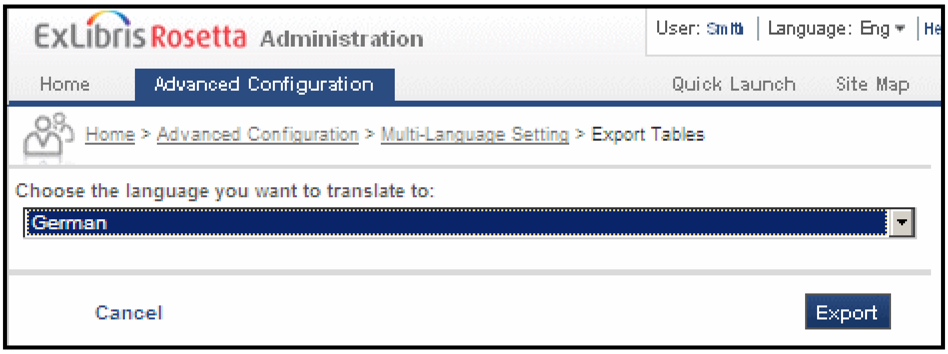


Figure 138: Exporting All Code Tables

When exporting, save the file to the directory of your choice, then open the file and enter translations. When you are finished translating, import the edited spreadsheet using the import function from the Multi-Language Setting page or the Code Tables page.

NOTE:

Make sure you select the language you translated into when making this selection for importing. If you change the selected language, the system reloads the UI and sends you back to the Home page.

When the language is loaded, the user can select it for viewing.

Updating in the UI

The UI method involves entering information directly into the code tables as they are displayed on the UI.

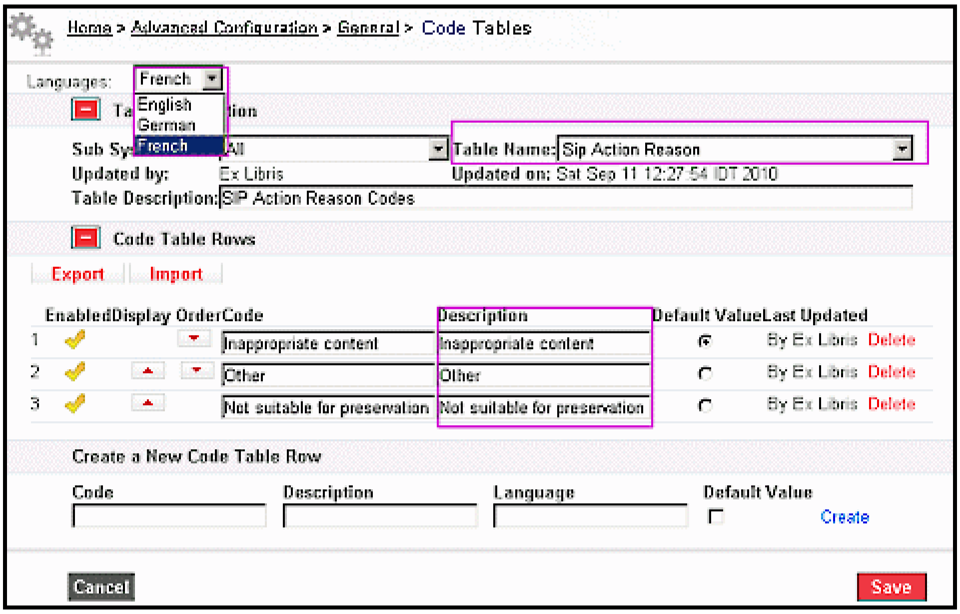


Figure 139: Key Fields for Translating Code Tables

From the **General > Code Tables** page, the user selects the following:

- a UI language from the **Languages** drop-down menu
- the code table from the **Table Name** drop-down menu.

The page refreshes with each selection. The **Description** column displays the text that should be translated into the language selected.

Clicking **Save** returns you to the previous page.

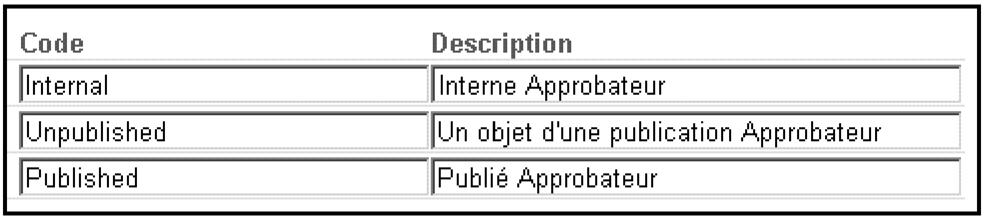


Figure 140: Translation Fields on the Code Table UI

UI Customization

Users can change Rosetta's login page image, logo, and color scheme, on the UI Customization page (**Administration module > Localization > UI Customization**).

Use the following links to see relevant topics:

Customizing the Login Page Image

You can customize the login page image in the default IU customization for the consortium.

To perform the customization:

1. From the UI Customization page (**Administration module > Localization > UI Customization**), click **Edit** for the default UI customization. The following appears:

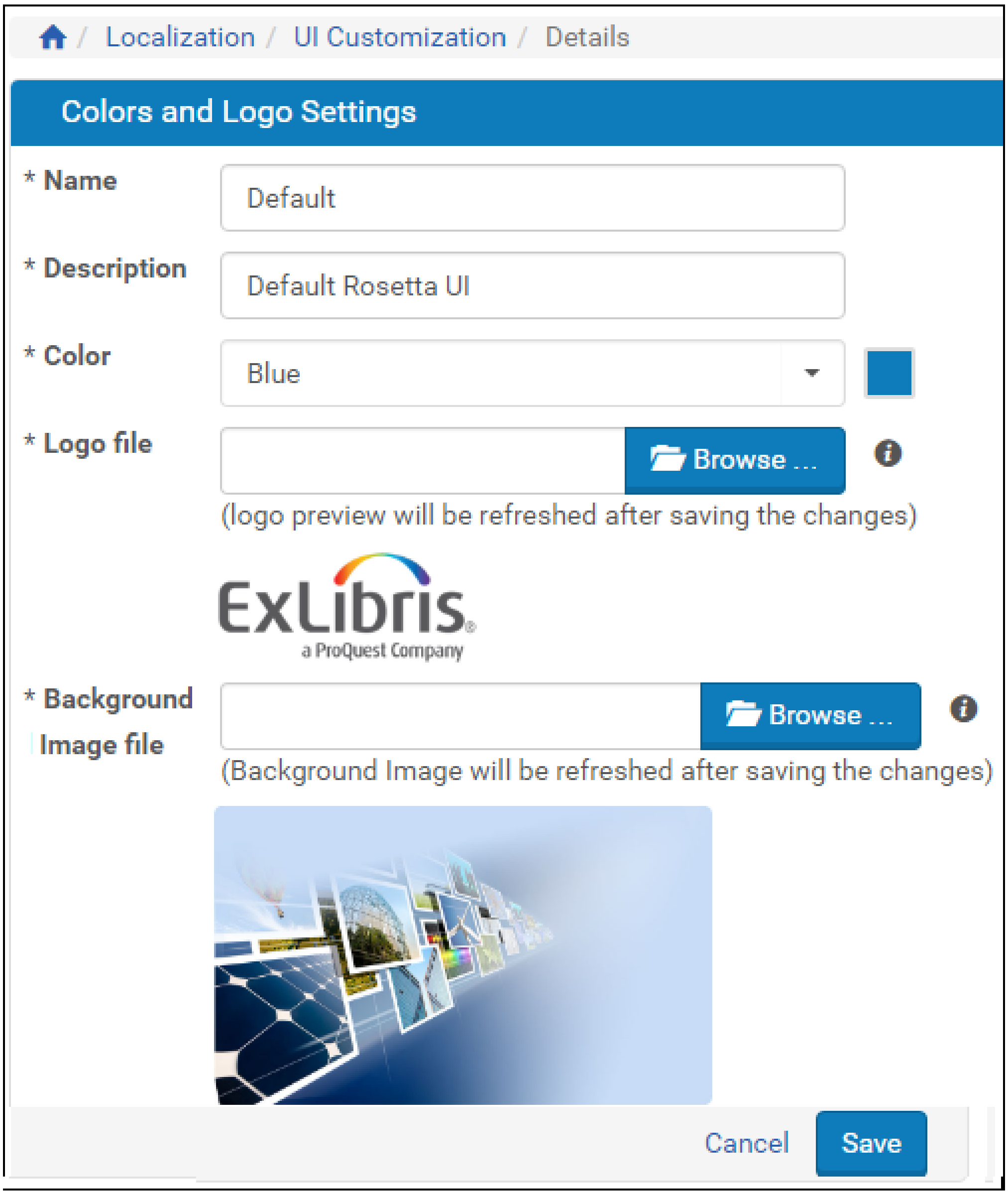


Figure 141: Login Page Customization

2. From the **Background Image File** field, click **Browse**.
3. Click **Save**. The background image you selected appears in the login page.

Customizing the Rosetta Logo and Color

You can customize the default logo that appears on the top right if the Rosetta header and the color of the interface by creating a customization profile with the logo and color you want. An administrator can then assign the profile to an institution so that the logo and color appear in the Rosetta interface of the institution.

NOTE:

There is no automatic restore-default function on the UI Customization page. It is recommended to save a copy of the current logo, so that you can later restore it.

To perform the customization:

1 From the Administration module, click **Localization > UI Customization** and click the **Add UI Customization** button. The following appears:

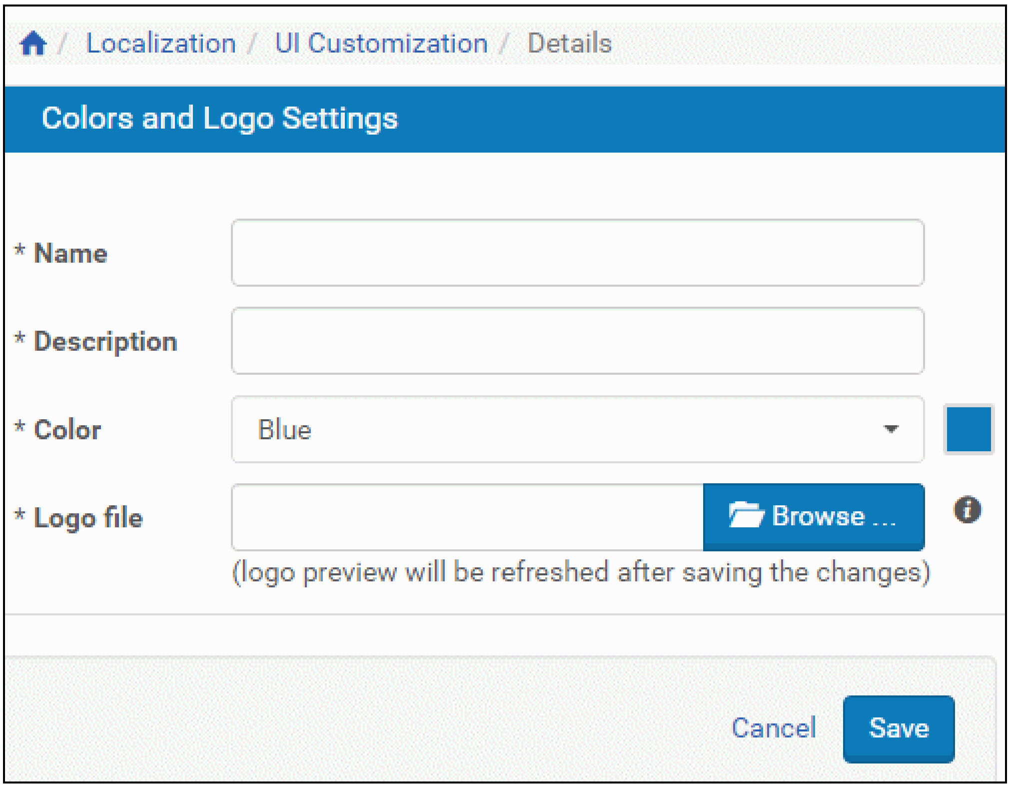


Figure 142: UI Customization

2 Enter a **Name** and **Description**. These will be helpful when you or another user assign the customization to a particular institution.

3 From the **Color** drop-down list, select a color.

4 To set a new logo, click **Browse** and select a logo.

NOTE:
Logos must be in jpg or png format. The recommended dimensions are 100 X 43.

5 Click **Save**. The changes are displayed.

You have to assign the new customization to an institution and log on as a user of that institution to see the changes in color and logo. For more information, see **UI Customization Per Institution** on page **222**.

UI Customization Per Institution

The System Administrator can define different UI customizations for different institutions. Users who log on to a customized institution see the logo and colors that the Administrator has specified (see **Customizing the Rosetta Logo and Color** on page **221**) for that institution.

The Delivery of an IE takes on the customization of the institution to which the IE belongs.

To assign a UI customization to an institution:

1 Access the List of institutions page **(Administration module > Administrative Structure).**

2 Select the name or **Edit** link of the institution you want to customize.

The institution's information and list of departments open.

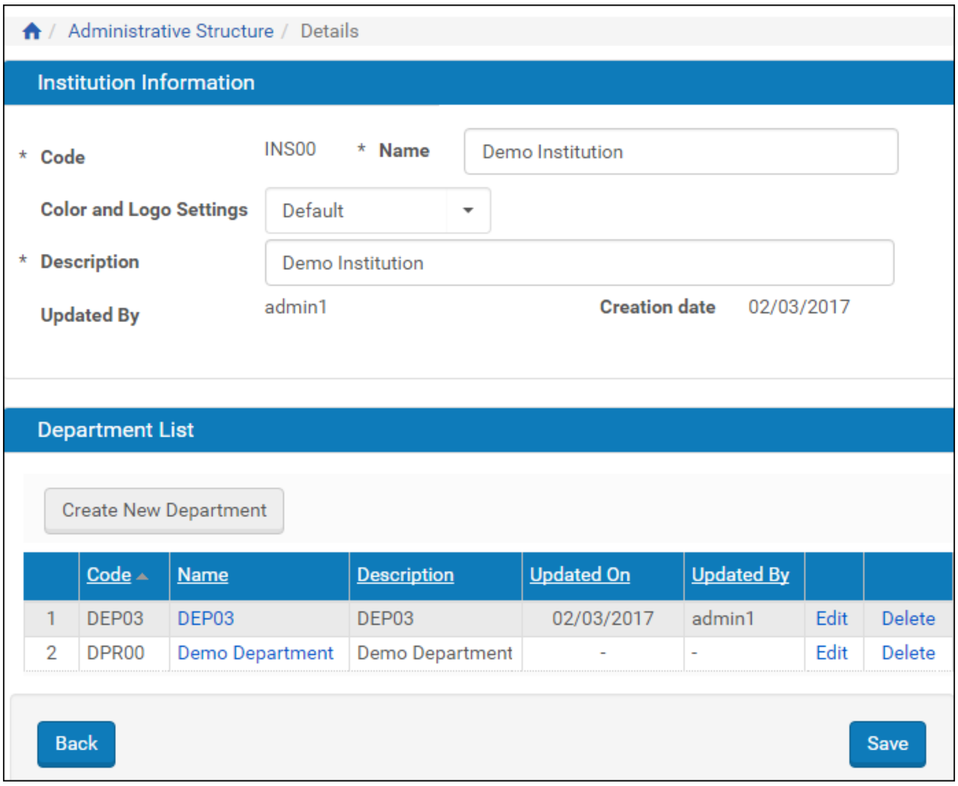


Figure 143: Assigning Color and Logo to an Institution

3 In the institution Information section of the page, from the **Color and Logo Settings** drop-down list, select the name of one of the defined UI customizations.

4 Click the **Save** button.

NOTE:

Changes may not be immediately viewable. You must be logged on to the institution whose UI you are changing to see the changes. If you are already logged on, refresh the page through your browser.

13

Configuring General Settings

This section contains:

Working with Configuration Files

Configuration files enable Administrators to configure advanced settings at the consortial level (such as metadata standards and e-mail configurations that all of the institutions in a consortium must conform to). The configuration files can be stored in various formats, including XML and XSL.

Configuration files are divided into functional groups, known as *file groups*, which can be further divided into sub-groups. Table 26 describes the organization of configuration files in the Rosetta system.

Table 26. Configuration File Groups and Sub-Groups

File Group	Files Define...
External Interfaces	Interaction with external systems
Metadata Editing Configuration	Web Editor configuration files
XSL Transformation	Manage various XSL files used to transform IEs throughout the system
User Emails Group	XSL files for Email formatting
General	Miscellaneous files

Adding XSL Configuration Files

You can add XSL configuration files to Rosetta that are used to convert XML documents to user friendly HTML. You can configure file delivery rules that determine when a specific XSL file is used. For more information, see Delivery Rules on page 38.

To add an XSL configuration file:

1 From the Administration interface, select **General > Configuration Files**.

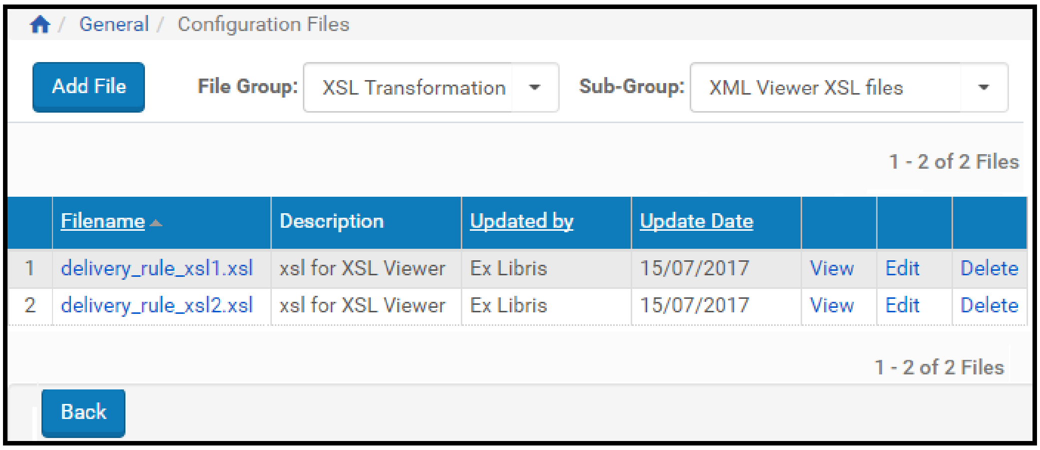


Figure 144: XSL Configuration Files

2 Click **Add File**.

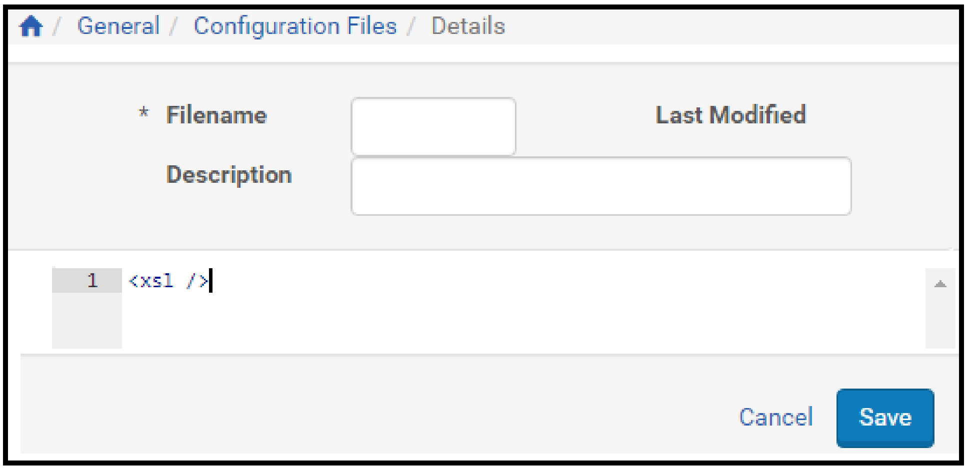


Figure 145: Add XSL Configuration File

3 Enter the filename, description, and the XSL configuration file.

4 Click **Save**.

The XSL configuration file is available when creating file delivery rules.

Working with General Parameters

Administrators can configure general parameters to control how the Rosetta system functions. General parameters are divided into functional groups known as modules, some of which are described in the following table.

CAUTION:

Avoid accessing general parameters unless you have in depth knowledge of the Rosetta system and you have contacted Ex Libris to discuss changing your settings. Performing an error on a general parameter can cause the system to malfunction.

Table 27. General Parameter Modules

Module	Description
Background jobs	Background job execution settings - for example, how many times per minute the system executes the metadata indexer program.
Backoffice	Back office configuration settings, such as default page size and password size.
BIRT	Reporting module settings, such as default paper size.
Deposit	Deposit process settings, such as default page size and event logging.
General	General settings, such as system time format.
Network	Network settings, such as inactivity connection time-out.
Authentication	Authentication settings, such as the name of the calling system.
Repository	Permanent Repository settings, such as the file storage system.

Administrators who do work with the general parameters use advanced configuration and the General Parameters mapping table. (For more information on accessing the List of General Parameters page, see **Administration Components** on page 18. For a description of the General Parameters, see the **General Parameters** section of the *Rosetta System Administration Guide*.)

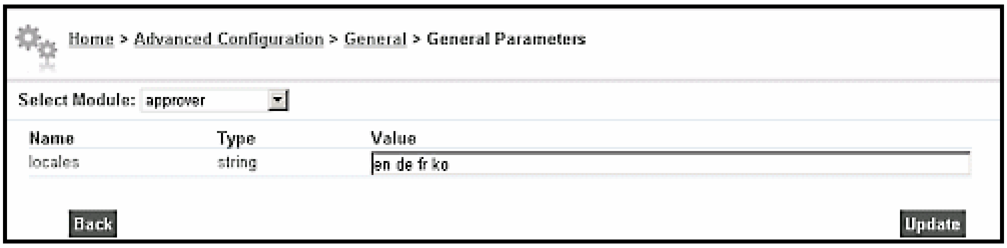


Figure 146: General Parameters Mapping Table

Working with Code Tables

Code tables contain options that staff and Administrators select when configuring the Rosetta system. For example, the Producer group code table contains groups for a Negotiator to choose from when creating a Producer account.

The Rosetta system assembles code tables into the following groups, known as subsystems:

- Common
- Data Model
- Deposit
- Events
- Infra
- Material Flow Management
- Menu
- Metadata Editor
- Metadata Forms
- Persistent Identifiers
- Preservation
- Process Management
- Producer Management
- Staging
- User Management

For a description of all available code tables, see **Rosetta Code Tables** on page 239.

Administrators can access the catalog of all code tables stored in the Rosetta system using the All Code Tables page. (For information on accessing the All Code Tables page, see **Administration** on page 17.).

In addition, this page enables Administrators to open individual code tables for editing. (For more information on working with individual code tables, see **Editing Code Tables** on page 229.)

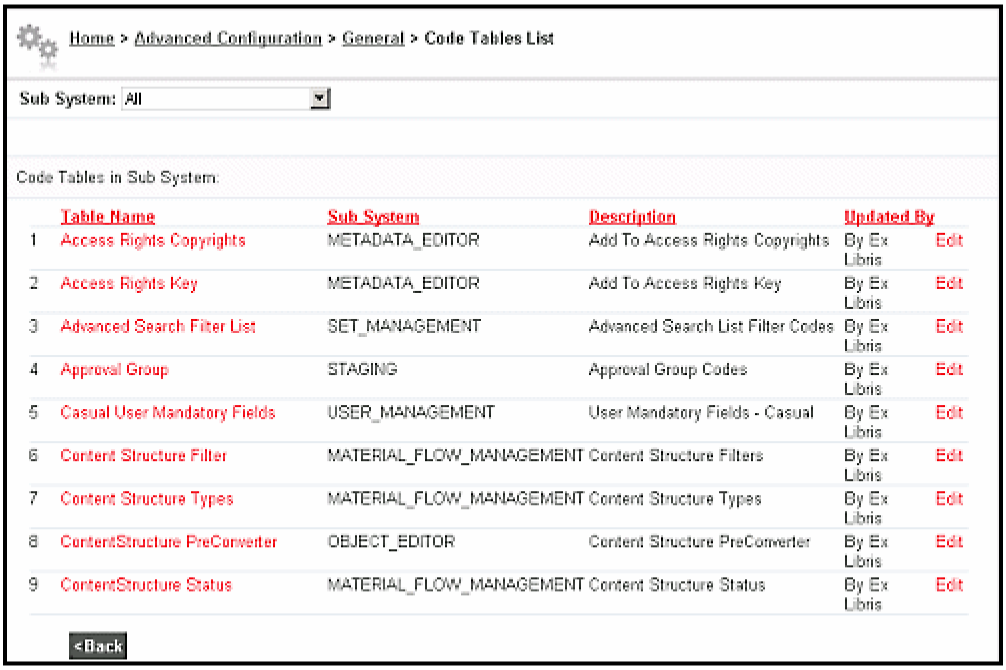


	Table Name	Sub System	Description	Updated By	
1	Access Rights Copyrights	METADATA_EDITOR	Add To Access Rights Copyrights	By Ex Libris	Edit
2	Access Rights Key	METADATA_EDITOR	Add To Access Rights Key	By Ex Libris	Edit
3	Advanced Search Filter List	SET_MANAGEMENT	Advanced Search List Filter Codes	By Ex Libris	Edit
4	Approval Group	STAGING	Approval Group Codes	By Ex Libris	Edit
5	Casual User Mandatory Fields	USER_MANAGEMENT	User Mandatory Fields - Casual	By Ex Libris	Edit
6	Content Structure Filter	MATERIAL_FLOW_MANAGEMENT	Content Structure Filters	By Ex Libris	Edit
7	Content Structure Types	MATERIAL_FLOW_MANAGEMENT	Content Structure Types	By Ex Libris	Edit
8	ContentStructure PreConverter	OBJECT_EDITOR	Content Structure PreConverter	By Ex Libris	Edit
9	ContentStructure Status	MATERIAL_FLOW_MANAGEMENT	Content Structure Status	By Ex Libris	Edit

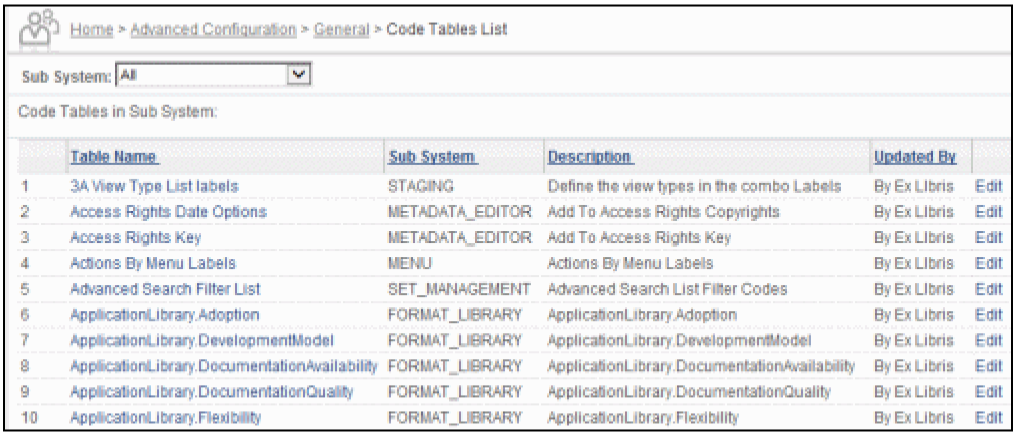
Figure 147: All Code Tables Page

Editing Code Tables

The All Code Tables page enables Administrators to open code tables for editing.

To open a code table for editing:

On the All Code Tables page, locate the code table to which you want to add an option and click **Edit**. The page containing available options of the selected code table opens.



Home > Advanced Configuration > General > Code Tables List

Sub System: All

Code Tables in Sub System:

	Table Name	Sub System	Description	Updated By	
1	3A View Type List labels	STAGING	Define the view types in the combo Labels	By Ex Libris	Edit
2	Access Rights Date Options	METADATA_EDITOR	Add To Access Rights Copyrights	By Ex Libris	Edit
3	Access Rights Key	METADATA_EDITOR	Add To Access Rights Key	By Ex Libris	Edit
4	Actions By Menu Labels	MENU	Actions By Menu Labels	By Ex Libris	Edit
5	Advanced Search Filter List	SET_MANAGEMENT	Advanced Search List Filter Codes	By Ex Libris	Edit
6	ApplicationLibrary.Adoption	FORMAT_LIBRARY	ApplicationLibrary.Adoption	By Ex Libris	Edit
7	ApplicationLibrary.DevelopmentModel	FORMAT_LIBRARY	ApplicationLibrary.DevelopmentModel	By Ex Libris	Edit
8	ApplicationLibrary.DocumentationAvailability	FORMAT_LIBRARY	ApplicationLibrary.DocumentationAvailability	By Ex Libris	Edit
9	ApplicationLibrary.DocumentationQuality	FORMAT_LIBRARY	ApplicationLibrary.DocumentationQuality	By Ex Libris	Edit
10	ApplicationLibrary.Flexibility	FORMAT_LIBRARY	ApplicationLibrary.Flexibility	By Ex Libris	Edit

Figure 148: Code Table Example

The following actions can be performed from the code table page:

- **Adding an Option to the Code Table** on page **230**
- **Activating and Deactivating an Option** on page **231**
- **Changing the Display Order** on page **232**
- **Deleting an Option** on page **232**

Adding an Option to the Code Table

Administrators can add options to a code table.

To add an option:

1 On the Advanced Configuration > General >All Code Tables page, locate the code table to which you want to add an option and click **Edit**. The page containing available options of the selected code table is displayed.

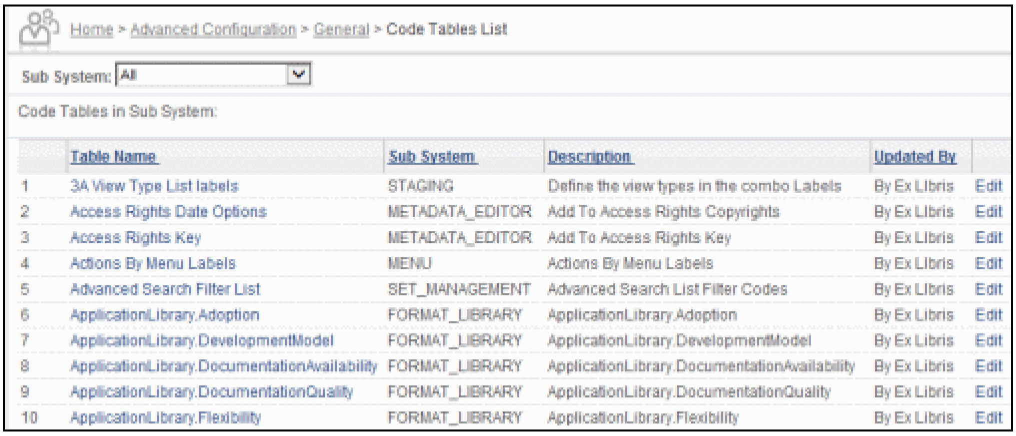


	Table Name	Sub System	Description	Updated By	
1	3A View Type List labels	STAGING	Define the view types in the combo Labels	By Ex Libris	Edit
2	Access Rights Date Options	METADATA_EDITOR	Add To Access Rights Copyrights	By Ex Libris	Edit
3	Access Rights Key	METADATA_EDITOR	Add To Access Rights Key	By Ex Libris	Edit
4	Actions By Menu Labels	MENU	Actions By Menu Labels	By Ex Libris	Edit
5	Advanced Search Filter List	SET_MANAGEMENT	Advanced Search List Filter Codes	By Ex Libris	Edit
6	ApplicationLibrary.Adoption	FORMAT_LIBRARY	ApplicationLibrary.Adoption	By Ex Libris	Edit
7	ApplicationLibrary.DevelopmentModel	FORMAT_LIBRARY	ApplicationLibrary.DevelopmentModel	By Ex Libris	Edit
8	ApplicationLibrary.DocumentationAvailability	FORMAT_LIBRARY	ApplicationLibrary.DocumentationAvailability	By Ex Libris	Edit
9	ApplicationLibrary.DocumentationQuality	FORMAT_LIBRARY	ApplicationLibrary.DocumentationQuality	By Ex Libris	Edit
10	ApplicationLibrary.Flexibility	FORMAT_LIBRARY	ApplicationLibrary.Flexibility	By Ex Libris	Edit

Figure 149: Code Table Example

2 Under **Create a New Code Table Row**, provide the requested information.

3 Click **Save**. The new option is displayed in the code table.

The new option is now available to Staff and Administrators who configure the Rosetta system.

Activating and Deactivating an Option

Administrators can temporarily deactivate an option in a code table when they want to make this option unavailable to staff users without deleting it.

On the code table page, the status of the option is indicated by the check mark in the **Active** column:

- Yellow = active
- Grey = inactive

To activate or deactivate an option in the code table:

1 On the code table page, locate the option that you want to activate or deactivate.

2 In the **Active** column, click the check mark. The check mark in the **Active** column indicates the new status.

The option status is changed from active to inactive, or from inactive to active.

Changing the Display Order

Administrators can change the order in which options are displayed to staff users on configuration pages.

To change the display order:

1. On the code table page, in the **Display Order** column, use the up and down arrows to change the display order.
2. Click **Save**.

The options are now displayed in the newly defined order.

Deleting an Option

Administrators can delete options from a code table. After deleting an option, it is no longer available on configuration pages.

To delete an option:

1. On the code table page, locate the option you want to delete and click **Delete**. The confirmation window is displayed.
2. Click **OK**.

The option is removed from the code table and is no longer displayed on configuration pages.

Working with Mapping Tables

Mapping tables enable Administrators to control the connections between entities in the Rosetta system. Like code tables, mapping tables are grouped into subsystems, as described in **Working with Code Tables** on page **228**. Mapping tables can be edited (see **Editing Mapping Tables** on page **233**).

Administrators can access the list of all mapping tables stored in the Rosetta system during advanced configuration, using the All Mapping Tables page. In addition, this page enables Administrators to access specific mapping tables.

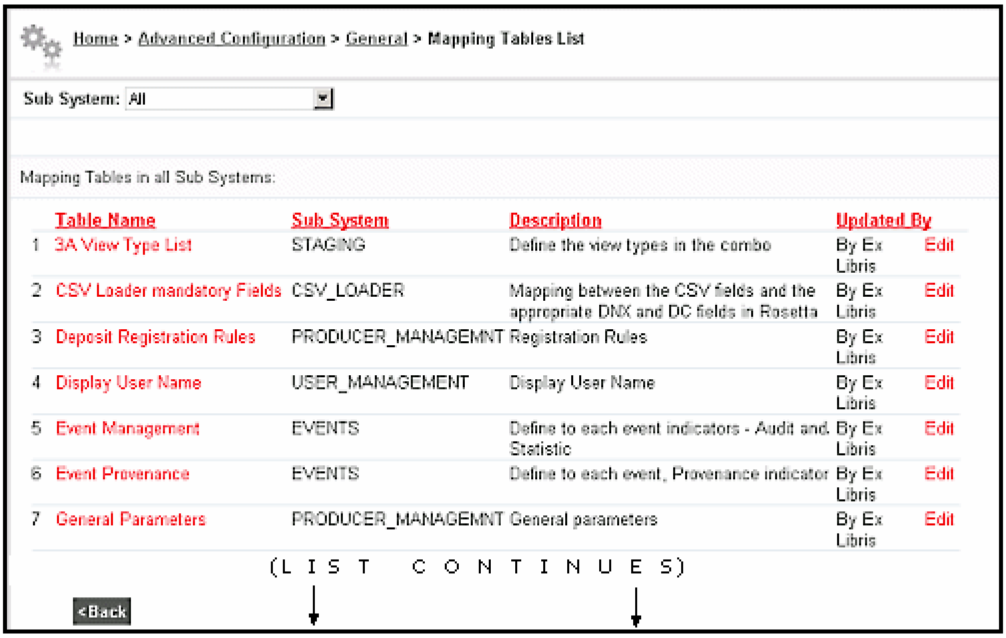


	Table Name	Sub System	Description	Updated By	
1	3A View Type List	STAGING	Define the view types in the combo	By Ex Libris	Edit
2	CSV Loader mandatory Fields	CSV_LOADER	Mapping between the CSV fields and the appropriate DNX and DC fields in Rosetta	By Ex Libris	Edit
3	Deposit Registration Rules	PRODUCER_MANAGEMNT	Registration Rules	By Ex Libris	Edit
4	Display User Name	USER_MANAGEMENT	Display User Name	By Ex Libris	Edit
5	Event Management	EVENTS	Define to each event indicators - Audit and Statistic	By Ex Libris	Edit
6	Event Provenance	EVENTS	Define to each event, Provenance indicator	By Ex Libris	Edit
7	General Parameters	PRODUCER_MANAGEMNT	General parameters	By Ex Libris	Edit

Figure 150: All Mapping Tables Page

Editing Mapping Tables

The All Mapping Tables page enables Administrators to open mapping tables for editing.

To open a mapping table for editing:

On the All Mapping Tables page, locate the mapping table you want to edit and click **Edit**. The page containing entries of the selected mapping table is displayed.

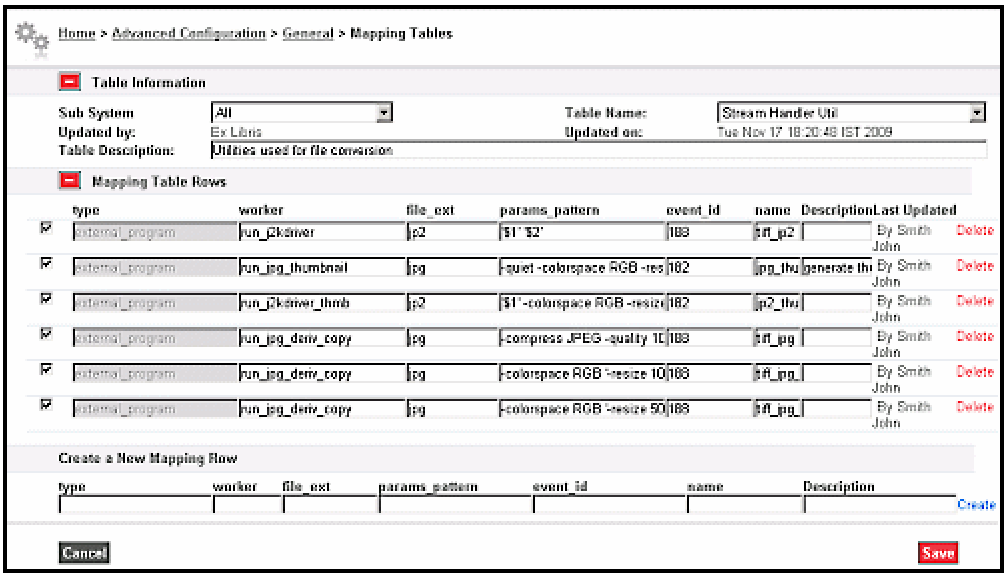


Figure 151: Mapping Table Example - Stream Handlers Mapping Table

Parameters to be provided can vary depending on the mapping table. However, the process of adding and deleting entries is identical for all mapping tables. The following actions can be performed from any mapping table:

- Adding an Entry to a Mapping Table
- Deleting an Entry from a Mapping Table

Adding an Entry to a Mapping Table

Administrators can add a new entry to a mapping table in order to define the connection between entities in the Rosetta system.

To add an entry to a mapping table:

1. On the All Mapping Tables page, locate the mapping table to which you want to add an entry and click **Edit**. The page containing entries of the selected mapping table is displayed.
2. Under **Create a New Mapping Row**, provide the requested information.
3. Click **Save**. The new entry is added to the table.

The Rosetta system can now use the new entry as defined.

Deleting an Entry from a Mapping Table

Administrators can delete an entry from a mapping table when the connection between entities is no longer required.

To delete an entry from a mapping table:

1. On the All Mapping Tables page, locate the mapping table from which you want to delete an entry and click **Edit**.

   The page containing the entries of the selected mapping table opens.

2. Locate the entry you want to delete and click **Delete**.

The entry is removed from the mapping table. The Rosetta system can no longer use the deleted entities.

System Checks

Rosetta performs the following system checks on start-up:

- Web services – Operability of Deposit, Delivery, Repository, and Permanent Web services in this environment
- PDS – Communication with PDS
- Plug-ins – Access to the plug-ins directory (to make sure that Rosetta has access to all plug-ins)
- Shared folders – Access to and available space in the `operational_shared` and `delivery_shared` folders
- Storage – Access to and available space in operational and permanent storage.

Rosetta may also perform these checks during ongoing sessions. See the *System Administration Guide* for details about their configuration.)

A serious failure for any of these checks results in a red error bar when the user logs on to the system (see **Figure 152**).

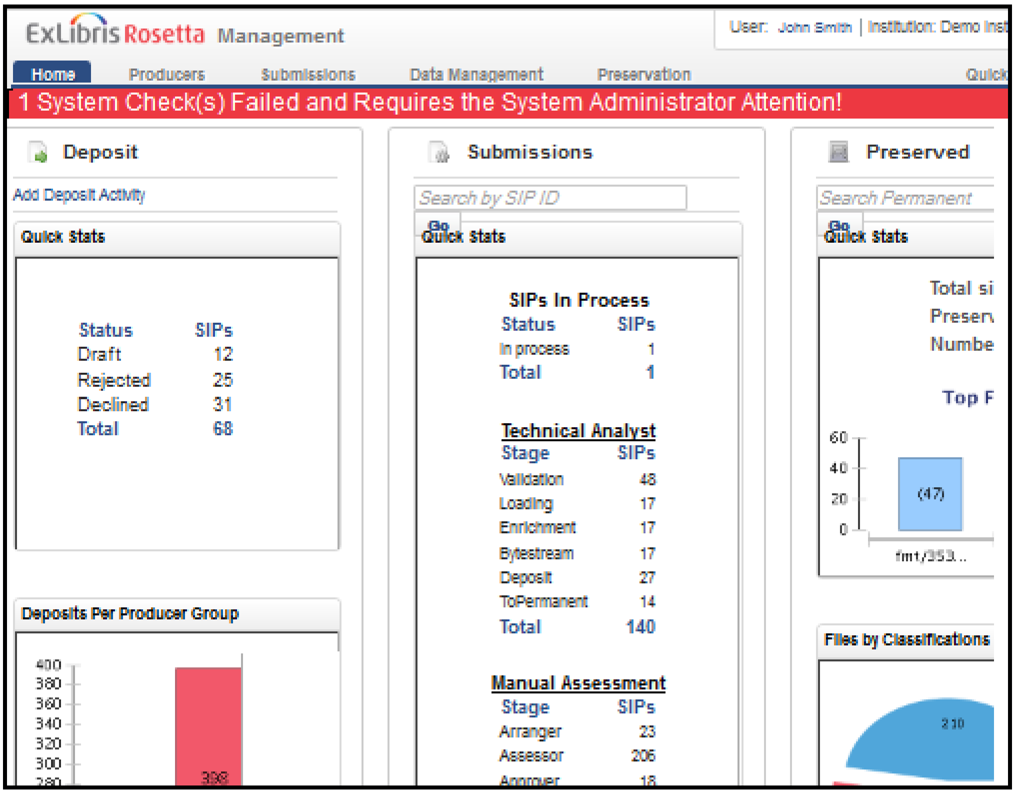


Figure 152: System Check Failure Warning

To view the details of the errors, from the Advanced Configuration page, go to **General > System Checks**.

The System Checks page (**Figure 153**) displays all of the errors identified by the system during start-up.

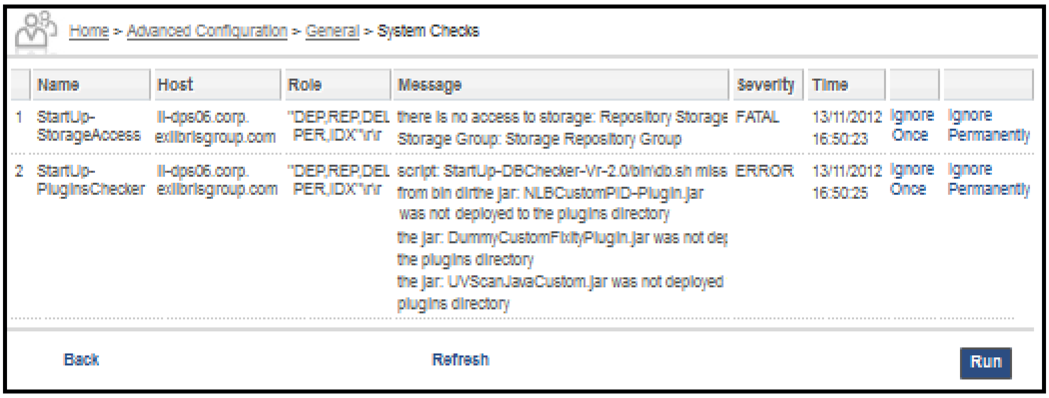


Figure 153: System Checks Page

The following information is included in the error table: name of the system check, host, role, a message about the error(s), the error's severity, and the time the error occurred.

NOTE:

Errors with the severity of FATAL cause the initial red bar at login. Other errors may allow you to carry out your work, although it is advisable to fix them.

Actions that can be taken from the System Checks page are:

- Run – Perform the check again
- Ignore Once – The problem is ignored once (entry is deleted from the database)
- Ignore Permanently – The check is removed from the list of checks

For more information on the configuration of the checks job, see the *System Administration Guide*.

A

Rosetta Code Tables

Rosetta code tables can be accessed from Advanced Configuration > General > All Code Tables. This path brings you to the Code Tables List (below).

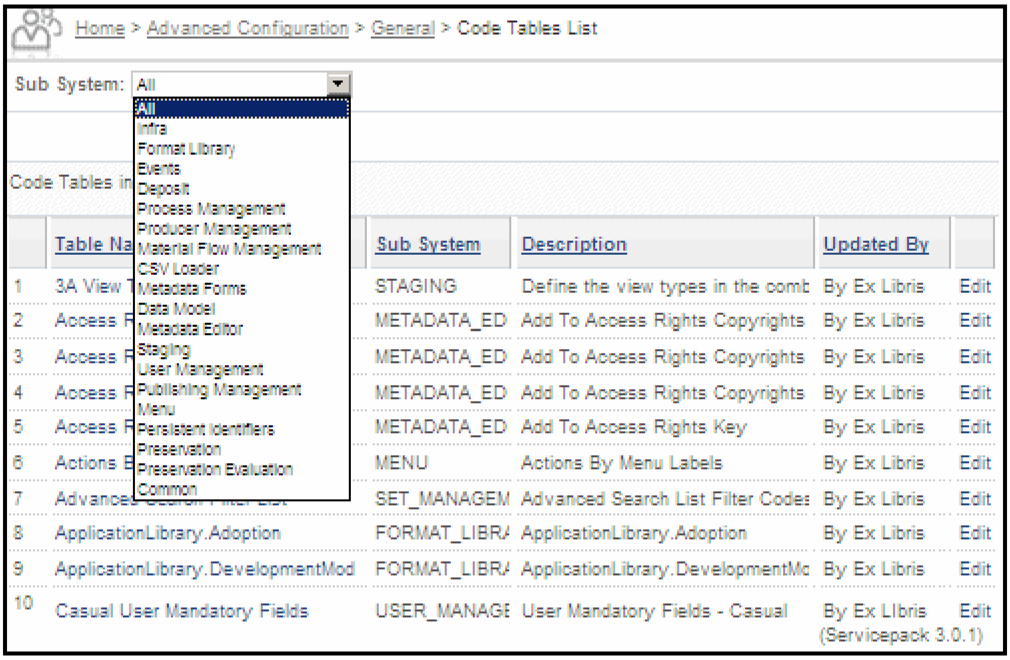


Figure 154: Code Tables List

You can view all the code tables alphabetically or you can filter by sub-system (using the drop-down menu). You can also sort by one of the red bold headings.

For information on how to perform procedures related to code tables, see **Working with Code Tables** on page 228.

The following table lists each code table with a brief description of its contents.

Table 28. List of Code Tables

DISPLAY_TABLE_NAME	DESCRIPTION	SUB_SYSTEM
ApplicationLibrary.Adoption	List of possible values that the user can select from, when estimating level of Adoption for each application in the application library	FORMAT_LIBRARY
ApplicationLibrary.DevelopmentModel	List of possible values that the user can select from, when describing development level for each application in the application library	FORMAT_LIBRARY
ApplicationLibrary.DocumentationAvailability	List of possible values that the user can select from, when describing the documentation availability for each application in the application library	FORMAT_LIBRARY
ApplicationLibrary.DocumentationQuality	List of possible values that the user can select from, when describing the documentation quality for each application in the application library	FORMAT_LIBRARY
ApplicationLibrary.Flexibility	List of possible values that the user can select from, when describing the flexibility level for each application in the application library	FORMAT_LIBRARY
ApplicationLibrary.Stability	List of possible values that the user can select from, when describing the stability level for each application in the application library	FORMAT_LIBRARY
Approval Group	List of Approval Group codes and descriptions.	STAGING
Country Codes	List of Country Codes that user can select from when editing the user details form.	COMMON
Delete IE Reasons	The list of possible reasons for deleting an IE.	METADATA_EDITOR
Fixity Type	The list of fixity types available for conducting fixity checks.	METADATA_EDITOR
FormatLibrary.Adoption	List of possible values that the user can select from, when estimating level of Adoption for each format in the format library	FORMAT_LIBRARY

Table 28. List of Code Tables

DISPLAY_TABLE_NAME	DESCRIPTION	SUB_SYSTEM
FormatLibrary.BaseFormat	List of possible values that the user can select from, when describing how basic the format is in regards to being rendered by most applications	FORMAT_LIBRARY
FormatLibrary.Documentation Availability	List of possible values that the user can select from, when describing the documentation availability for each format in the format library	FORMAT_LIBRARY
FormatLibrary.Documentation Quality	List of possible values that the user can select from, when describing the documentation quality for each format in the format library	FORMAT_LIBRARY
FormatLibrary.FormatStability	List of possible values that the user can select from, when describing the stability level for each format in the format library	FORMAT_LIBRARY
FormatLibrary.Standardisation	List of possible values that the user can select from, when describing the standardization level for each format in the format library	FORMAT_LIBRARY
IE Entity Type	List of possible IE Entity Types. (e.g. Digitized book, movie, audio etc.)	DATA_MODEL
Material Type	List of possible Material Types. These values are used for logical grouping of Material Flows.	PRODUCER_MANAGEMENT
Metadata Form - User Defined Lookup - 1	List of possible values that the producer agent can select from when populating a Metadata Form Field.	METADATA_FORM
Metadata Form - User Defined Lookup - 2	List of possible values that the Producer Agent can select from when populating a Metadata Form Field.	METADATA_FORM
Organization Mandatory Fields	List of Mandatory Fields for Organization Users (e.g. First name, last name, telephone number)	USER_MANAGEMENT
Preservation Type	List of possible values for the Preservation Type field of the representation.	COMMON
Producer Classifications	List of possible Producer Classifications for grouping Producers.	PRODUCER_MANAGEMENT
Producer Group	List of possible Producer Groups for grouping Producers and Negotiators.	PRODUCER_MANAGEMENT

Table 28. List of Code Tables

DISPLAY_TABLE_NAME	DESCRIPTION	SUB_SYSTEM
Producer Local Field 1	Text field that can be added to the Producer Form for holding more details.	PRODUCER_MANAGEMENT
Producer Local Field 2	Text field that can be added to the Producer Form for holding more details.	PRODUCER_MANAGEMENT
Producer Mandatory Fields	List of mandatory fields for the Producer record (e.g. Authoritative name)	PRODUCER_MANAGEMENT
Registration Reason	List of reasons that a self registering user can choose from when he fills the registration form. The system selects the matching Producer Group based on the user's selection.	PRODUCER_MANAGEMENT
Restore IE Reasons	List of possible reasons for describing why an IE should be restored and not deleted.	METADATA_EDITOR
Sip Action Reason	List of reasons for rejecting or declining SIPs or IEs that can be selected by the staff members (e.g. Assessor, Approver etc.)	STAGING
Staff User Mandatory Fields	List of mandatory fields for staff users (e.g. First name, last name, telephone number)	USER_MANAGEMENT
Systems	List of external systems with mapping for CMS system code and description.	METADATA_EDITOR
User Language	List of Languages that the system can be translated to.	USER_MANAGEMENT
User Mandatory Fields	List of Mandatory Fields for the User record (e.g. First name, last name)	USER_MANAGEMENT
Validation Profile List	List of Descriptive MD Validation Profiles	COMMON
Other Source Metadata Subtype	List of possible subtype values that the user can specify when using source metadata of type OTHER.	DATA_MODEL

NOTES:

- File extensions and mime types are managed through the Format Library. Each format has associated file extensions and mime types, and the system presents them as a list when needed.

- File extensions are listed when a user is configuring submission formats or using the Search UI.
- A list of mime types is displayed as part of the Search UI.

B

Rosetta Mapping Tables

Rosetta mapping tables can be accessed from **Advanced Configuration > General > All Mapping Tables**. This path brings you to the Mapping Tables List (see figure below).

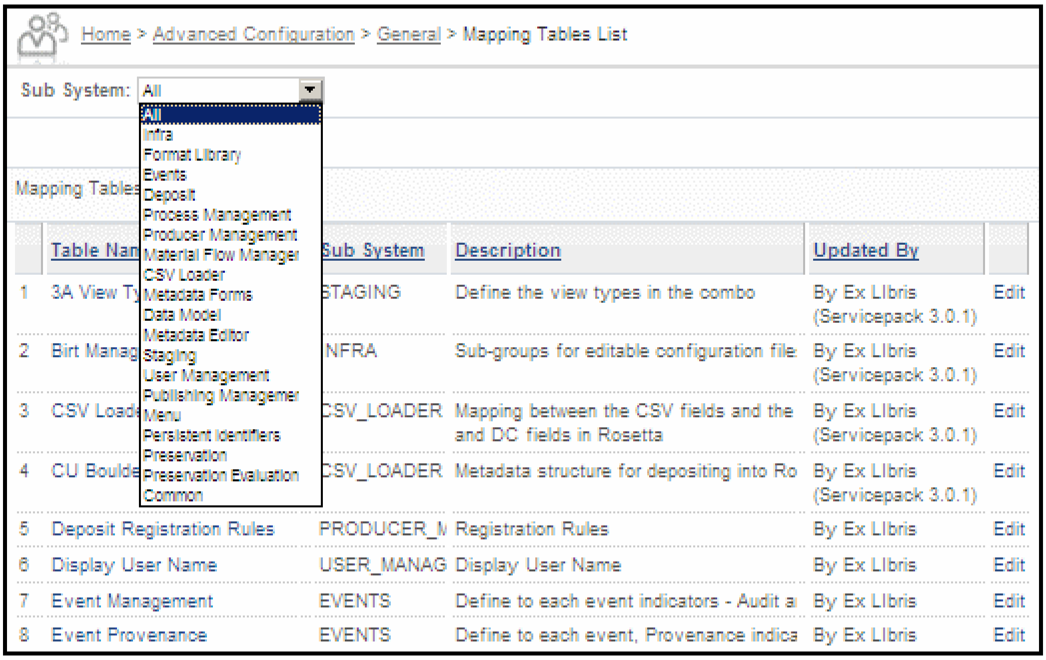


Figure 155: Mapping Tables List

You can view all the mapping tables alphabetically or you can filter by sub-system (using the drop-down menu). Or you can sort by one of the red bold headings.

For information on how to perform procedures related to mapping tables, see **Working with Mapping Tables** on page 232.

The following table lists each mapping table with a brief description of its contents.

Table 29. List of Mapping Tables

DISPLAY_TABLE_NAME	DESCRIPTION	SUB_SYSTEM
3A View Type List	Define the view types in the combo	STAGING
Display User Name	This table determines the appearance order of the first name and last name in the different user types.	USER_MANAGEMENT
Event Management	List of all system events with the indications wether it is Audit and/or Statistic events.	EVENTS
Event Provenance	This table shows the list of events that are indicated as Provenance Events	EVENTS
General Parameters	General parameters	PRODUCER_MANAGEMENT
Handle PI Creation	This table holds the parameters for the PI creation (e.g. PI Prefix)	PI
Handle PI Publishing - Public/Private Key	This table holds the parameter for the Handle PI Publishing - for records that have Public or Private Key	PI
Handle PI Publishing - Secret Key	This table holds the parameter for the Handle PI Publishing - for records that have Secret Key	PI
Homepage Bulletin	This table holds the text that can be shown in the Home page, on top of the links to the management areas.	MENU
IP WebService Restriction	This table holds the mapping between list of web services and IP ranges where these web services are restricted.	INFRA
List Of Servers	This table holds the different servers of the system and their paths.	COMMON
Preservation Properties	This table holds the list of fields that are part of the Descriptor file, used for external preservation alternatives.	PRESERVATION
Role Quick Links	This table allows users to hide or customize the labels of items in the Quick Launch Menu.	MENU
Stream Handler Util	This table holds the mapping between the command names of the Utilities used for file conversion and their specific parameters.	STAGING

Table 29. List of Mapping Tables

DISPLAY_TABLE_NAME	DESCRIPTION	SUB_SYSTEM
Technical Metadata Extraction Adaptors	This table holds the list of the different adapters of the MD Extractors	DEPOSIT
User History Event List	This table holds the list of events that are displayed to the Producer Agent in the Deposit work area.	EVENTS
Birt Management Reports	This table defines how reports appear in the user interface.	INFRA

C

Events

The following table describes events in Rosetta. The following types of events are possible:

- Provenance Event – an action that involves at least one object in the repository. Its details are stored in the object's DNX.
- Audit Event – an event that is stored as a discrete entry in an audit event table and can be accessed through reports.
- Statistic Event – an event that is added to a calculated aggregate of events over a period of time, used for determining event measures (such as average or number).

NOTE:
If a validation event outcome is identical to a previous event outcome, the outcome is not listed in the dnx. Note that in a case of a validation software upgrade, a plugin version update, and changing tools, the validation event is listed, even if the outcome is the same as the previous event.

Table 30. Events

ID	Description	Provenance	Audit	Statistic
1	User authenticated/successful login	N	N	N
2	Create Deposit Activity	N	N	N
3	Save Deposit Activity	N	N	N
4	Delete Deposit Activity	N	N	N
5	Submit Deposit Activity	N	Y	Y
6	Request SIP ID for Deposit Activity	N	N	N
7	Generate SIP ID	N	Y	Y
8	Upload of file(s)	N	N	N

Table 30. Events

ID	Description	Provenance	Audit	Statistic
9	Started Acquiring Content	N	N	N
10	Finished Acquiring Content	N	N	N
11	Started converting SIP contents to METS	N	N	N
12	Finished converting SIP contents to METS	N	N	N
13	Started sanity check of SIP contents	N	N	N
14	Finished sanity check of SIP contents	N	N	N
16	Started wrapping SIP for submission to Staging Server	N	N	N
17	Finished wrapping SIP for submission to Staging Server	N	N	N
18	SIP submitted to Staging Server	N	Y	Y
19	Started converting SIP to AIPs	N	N	N
20	Finished converting SIP to AIPs	N	N	N
21	Created Repository Object	Y	N	N
23	Started Validation Stack Stage	N	N	N
24	Virus check performed on file	Y	N	N
25	Format Identification performed on file	Y	N	N
27	Fixity check performed on file	Y	Y	Y
28	Processing configuration has been determined for the SIP	N	N	N
29	SIP started Technical Analyst stage	N	N	N
30	Technical Analyst - Re-perform Validation Stack	Y	N	N
31	Technical Analyst - Reject File	Y	Y	Y
32	Technical Analyst - Decline File	Y	Y	Y
33	Technical Analyst - Decline SIP	N	Y	Y
34	Technical Analyst - Reject SIP	N	Y	Y

Table 30. Events

ID	Description	Provenance	Audit	Statistic
35	Technical Analyst - Move SIP to Next Step	N	Y	Y
36	Technical Analyst - Quarantine SIP	N	N	N
37	Technical Analyst - Forward SIP	N	N	N
38	Manually Set Format Library ID on File	Y	Y	Y
39	Download File	N	Y	Y
40	Upload and Replace File	Y	Y	Y
41	SIP completed Technical Analyst stage	N	N	N
42	SIP started Assessor stage	N	N	N
43	Assessor - Reject IE	Y	Y	Y
44	Assessor - Decline IE	Y	Y	Y
45	Assessor - Decline SIP	N	Y	Y
46	Assessor - Reject SIP	N	Y	Y
47	SIP completed Assessor stage	N	N	N
48	Assessor - Approve SIP	N	Y	N
49	SIP started Approver stage	N	N	N
50	Approver - Decline SIP	N	Y	Y
52	Approver - Reject SIP	N	Y	Y
54	Approver - Move to next step SIP	N	Y	N
55	SIP completed Approver stage	N	N	N
56	SIP started Arranger stage	N	N	N
57	SIP completed Arranger stage	N	N	N
58	Arranger - Reject SIP	N	Y	Y
59	Arranger - Approve SIP	N	N	N
62	Assign CMS ID to IE	Y	N	N
63	SIP started enrichment stage	N	Y	Y

Table 30. Events

ID	Description	Provenance	Audit	Statistic
64	SIP encountered error in enrichment stage	N	Y	Y
65	System generated a new representation	N	N	N
66	System generated external unique identifier	Y	Y	Y
67	System generated thumbnails	N	N	N
68	System started moving SIP content to permanent repository	N	Y	Y
71	Perform file validation checks on permanent repository	N	N	N
72	System finished moving SIP content to permanent repository	N	Y	Y
73	Generic metadata form record created	N	N	N
74	Generic metadata form record updated	N	N	N
75	Generic metadata form record deleted	N	N	N
76	Personalized metadata form record created	N	N	N
77	Personalized metadata form record updated	N	N	N
78	Personalized metadata form record deleted	N	N	N
79	Code/Mapping/File/GenParam entry was created	N	N	N
80	Code/Mapping/File/GenParam entry was updated	N	N	N
81	Code/Mapping/File/GenParam entry was deleted	N	N	N
82	Generic submission format record created	N	N	N
83	Generic submission format record updated	N	N	N

Table 30. Events

ID	Description	Provenance	Audit	Statistic
84	Generic submission format record deleted	N	N	N
85	Content structure template record created	N	N	N
86	Content structure template record updated	N	N	N
87	Content structure template record deleted	N	N	N
88	Personalized submission format record created	N	N	N
89	Personalized submission format record updated	N	N	N
90	Personalized submission format record deleted	N	N	N
91	Generic Material flow record created	N	N	N
92	Generic Material flow record updated	N	N	N
93	Generic Material flow record activated/ deactivated	N	N	N
94	Generic Material flow record deleted	N	N	N
95	Generic Material Flow associated with Generic Producer	N	N	N
96	Generic Material Flow removed from Generic Producer	N	N	N
97	Personalized Material flow record created	N	N	N
98	Personalized Material flow record updated	N	N	N
99	Personalized Material flow record activated/ deactivated	N	N	N
100	Personalized Material flow record deleted	N	N	N

Table 30. Events

ID	Description	Provenance	Audit	Statistic
101	Generic Material Flow associated with Personalized Producer Profile	N	N	N
102	Generic Material Flow removed from Personalized Producer Profile	N	N	N
103	User record created	N	Y	Y
104	Contact user record created	N	Y	Y
105	Role Profile created	N	N	N
106	Role Profile deleted	N	N	N
107	Role Profile updated	N	N	N
108	Role Profile status changed from/to	N	N	N
109	Role Profile parameters updated from/to	N	N	N
110	User record updated	N	N	N
111	Primary Contact applied	N	N	N
113	User record deleted	N	Y	Y
115	Organization user record deleted	N	N	N
117	User record deletion blocked	N	N	N
120	Add representation	Y	N	N
124	Derive representation	Y	N	N
125	Add Metadata	Y	N	N
126	Edit (jump to editor, into control/streamref/md/des tabs)	N	N	N
127	Export object	N	N	N
128	Download file	N	N	N
130	Object's Metadata Record Modified	Y	N	N
138	Add representation	N	Y	Y
139	Download stream	N	N	N

Table 30. Events

ID	Description	Provenance	Audit	Statistic
144	Converted METS to IE	N	N	N
145	Started Loading IE	N	N	N
146	Finished Loading IE	N	N	N
147	Arranger - Decline IE	Y	Y	Y
148	Arranger - Reject IE	Y	Y	Y
149	Assessor - Assign CMS ID to IE	Y	N	N
150	Set created	N	N	N
151	Set deleted	N	N	N
154	Search is being processed	N	N	N
155	Set updated	N	N	N
156	Producer Agent has been applied	N	Y	Y
157	Producer Agent has been approved by Negotiator	N	N	N
158	Producer Agent's Status has been changed by Negotiator	N	N	N
159	Producer Agent's has been removed	N	N	N
160	Object is being viewed	N	Y	Y
161	Representation deleted	Y	N	N
162	Object's Metadata Record Deleted	Y	N	N
163	Object is being processed for viewing	N	Y	Y
164	Object viewing is denied due to Access Rights restrictions	N	Y	Y
165	Technical Metadata extraction performed on file	Y	N	N
166	Completed Validation Stack Stage	N	Y	Y
167	Metadata enrichment (CMS fetching)	N	N	N
168	Object indexing	N	N	N

Table 30. Events

ID	Description	Provenance	Audit	Statistic
169	User is not authorized to log in to system	N	N	N
170	Upload file	Y	N	N
171	Assign SIP	N	N	N
172	Process Automation task result	N	N	N
173	Process Automation evaluation result	N	N	N
174	Process Ended BULK creation	N	Y	N
175	Worker Started Processing Bulk	N	Y	N
176	Worker Ended Processing Bulk	N	Y	N
177	Watchdog restarted worker	N	Y	N
178	Process Automation Monitor changed Bulk status	N	Y	N
180	Virus Check	Y	Y	N
181	Format ID and Extraction	Y	Y	N
182	Thumbnail	N	Y	N
183	Persistent ID generation	Y	Y	N
184	Persistent ID publishing	N	Y	N
185	Export	N	Y	N
186	Publishing	N	Y	N
187	Delete IE/Rep	N	Y	Y
188	Derivative Copy Creation	N	N	N
189	Metadata Enrichment	Y	Y	N
190	Metadata Validation	N	N	N
191	Assign AR Policy	Y	Y	N
192	Create Search Indexes	N	Y	N
194	Create new process	N	Y	N
195	Delete process	N	Y	N
196	Update Process	N	Y	N
197	Rerun Process	N	Y	N

Table 30. Events

ID	Description	Provenance	Audit	Statistic
198	Automatically Set Format Library ID on File	Y	N	N
199	Automatically Ignore Error	Y	N	N
200	Process Started Execution	N	Y	N
201	Manually Ignore Error	Y	Y	N
202	Process Started BULK creation	N	Y	N
206	Add note to SIP	N	N	N
207	Process Automation framework result	N	N	N
208	Arranger - Decline SIP	N	Y	Y
209	Assessor - Forward SIP	N	N	N
210	Process Ended Execution	N	Y	N
211	Object has been locked	Y	N	N
212	Object has been rolled back	Y	Y	Y
213	Object has been committed	Y	Y	Y
214	Commit/Rollback error	N	Y	Y
215	SIP moved between stages	N	N	N
216	Started MD Validation Stage	N	N	N
217	Failed MD Validation Stage	N	Y	N
218	Completed MD Validation Stage	N	Y	N
271	Email sent to user	N	Y	N
272	IE has been deleted	N	N	N
273	IE has been recovered	N	N	N
274	IE has been purged	Y	N	N
275	IE has been restored	N	N	N
276	IE has been split	N	Y	Y
277	IE has been merged	N	Y	Y
300	Processing Add Representation	N	Y	Y
302	Add Representation failed	N	Y	Y

Table 30. Events

ID	Description	Provenance	Audit	Statistic
303	Add Representation Unknown Property	N	Y	Y
313	ByteStream container extraction	N	Y	Y
317	BitStream technical metadata extraction	N	Y	Y
319	BitStream virus check	N	Y	Y
338	Assign plan evaluator	N	Y	N
339	Preservation plan has been created	N	Y	N
340	Preservation plan has been edited	N	Y	N
341	Preservation plan has been deleted	N	Y	N
342	Plan alternative has been created	N	Y	N
343	Plan alternative has been edited	N	Y	N
344	Plan alternative has been deleted	N	Y	N
345	Plan has been signed off on	N	Y	N
346	Plan status has been changed	N	Y	N
347	Alternative test has been launched	N	Y	N
348	Plan execution has been scheduled	N	Y	N
349	Preservation Plan Execution result	N	Y	N
350	Process Ended block creation	N	Y	N
355	Representation was added by preservation plan execution	N	Y	N
356	Started Converting Rep	N	Y	N
357	Finished Converting Rep	N	Y	N
358	Started Loading Rep	N	Y	N
359	Finished Loading Rep	N	Y	N
360	Started Enrichment Stack Stage for block	N	Y	N

Table 30. Events

ID	Description	Provenance	Audit	Statistic
361	Completed Enrichment Stack Stage for block	N	Y	N
367	Technical Analyst - Skipped Files	N	Y	N
368	Technical Analyst - Abort Block	N	Y	N
369	Technical Analyst -Rerun Conversion	N	Y	N
370	Technical Analyst -Rerun Loading	N	Y	N
372	Manually Set Format Library ID on File	N	Y	N
373	Manually Set Format Library ID on File	Y	Y	N
374	Evaluator - Manual evaluation of Rep	N	Y	N
375	Evaluator - Complete evaluation	N	Y	N
376	Add note to block	N	Y	N
378	Manually Ignore Error	N	Y	N
379	Rip Moved Between Stages	N	N	N
380	Representation has been added	Y	Y	Y
381	Risk identification performed on file	Y	N	N
382	Permanent failed processing work	N	Y	Y
383	Permanent checksum failed	N	Y	Y
384	Resubmit Deposit	N	Y	Y
385	Upload and Replace File by Producer Agent	Y	Y	Y
386	Request_NLB_PID	Y	Y	Y
387	Recieve_NLB_PID	Y	Y	Y
388	File Original Path has been changed	Y	N	N
389	BitStream risk extraction	N	Y	Y

Table 30. Events

ID	Description	Provenance	Audit	Statistic
390	BitStream file identification	N	Y	Y
391	BitStream file identification zero results	N	Y	Y
392	BitStream file identification multiple results	N	Y	Y
393	BitStream technical metadata extractor not defined	N	Y	Y
396	Manually Ignore Error	Y	Y	N
397	METS Validation Failed	N	Y	Y
398	Collection has been created	N	Y	Y
399	Collection has been updated	N	Y	Y
400	Collection has been deleted	N	Y	Y
401	IE has been added to collection	Y	Y	Y
402	IE has been removed from collection	N	Y	Y
403	Manually ignore file extension mismatch	Y	Y	Y
404	Automatically ignore file extension mismatch	Y	Y	Y
405	Manually ignore file md error	Y	Y	Y
406	Automatically ignore file md error	Y	Y	Y
407	Manually ignore file extension mismatch	Y	Y	Y
408	Manually ignore file md error	Y	Y	Y
409	Assign Retention Policy	Y	Y	Y
410	Unassign Retention Policy	Y	Y	Y
411	Collection has been created by API	N	Y	Y
412	Collection has been updated by API	N	Y	Y
413	Collection has been deleted by API	N	Y	Y

Table 30. Events

ID	Description	Provenance	Audit	Statistic
414	Representation metadata has been updated	Y	Y	Y
415	An AR policy has been removed from an object	Y	Y	N
416	The IE had been moved to another Institution/Department	Y	Y	Y
417	The Representation has been updated	Y	Y	Y
418	Collection has been published	N	Y	Y
419	Collection has been unpublished	N	Y	Y
420	Unassign CMS	Y	Y	Y

Index